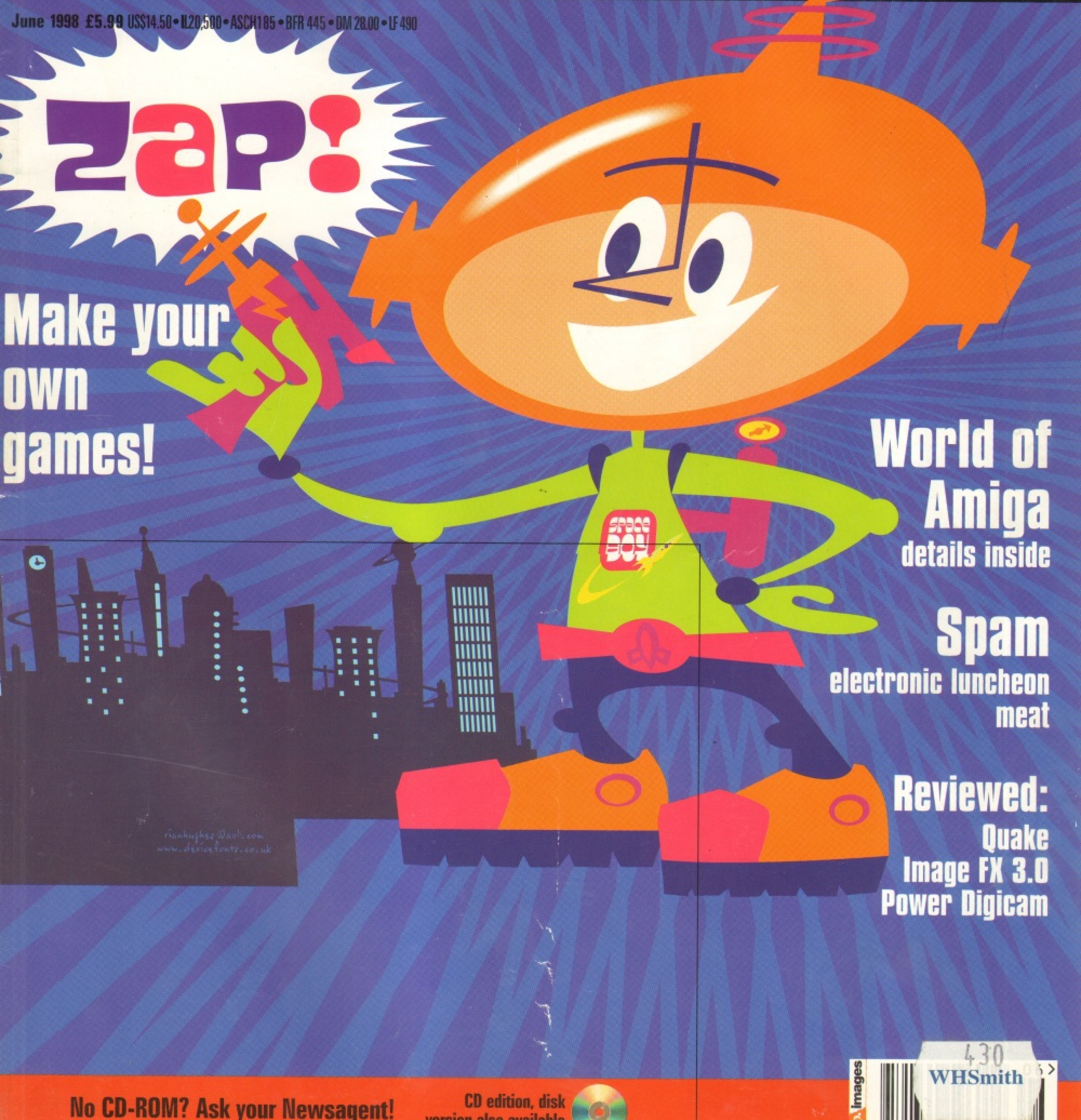
Now Officially The World's Best Selling Amiga Magazine!

CU AMIGA MAGAZINE

June 1998 £5.99 US$14.50 • IL20,500 • ASCH185 • BFR 445 • DM 28.00 • LF 490



Make your own games!

World of Amiga
details inside

Spam
electronic luncheon meat

Reviewed:
Quake
Image FX 3.0
Power Digicam

No CD-ROM? Ask your Newsagent!

CD edition, disk version also available



Weird Science
Phone 0116 246 3800
Fax 0116 246 3801
Email sales@weirdscience.co.uk
WWW www.weirdscience.co.uk
Q House, Troon Way Business Centre, Humberstone Lane, Leicester. LE4 9HA
AMINET CDs
AMIGA SUPERSTAR
AMIGA GOLD FORMAT
AMINET 23
AMINET 22
AMINET 21
AMINET 20
AMINET 19
ALL ONLY £10.99 EACH
Subscribe to the Aminet Series and receive each CD for just £8.99.
Subscription is FREE and each CD is only charged upon release.
AMINET SET 5
AMINET SET 4
AMINET SET 3
AMINET SET 2
AMINET SET 1
£27.99 £27.99 £15.99 £15.99 £15.99
AMINET 24 AND SET 6 IN STOCK NOW!
CYGNUS ED 4 £29.99
TURBO CALC 5 £69.99
TURBO PRINT 6 £39.99
P.OS PRE-REL. £19.95
MIDI NET £19.95
GIGA GRAPHICS £9.99
GEEK GADGETS £12.99
GEEK GADGETS 2 £12.99
DEVELOPERS CD £10.99
REPAIR KIT £34.99
MAGIC PUBLISHER £29.99
WEB IT £19.95
MODS ANTHOLOGY £22.99
SCHWARTZ CD £19.95
SYS BOOSTER £9.99
P. PAINT 7.1 £24.99
KARA CD £9.99
PIC. MAN. £39.99
MINI OFFICE £17.99
FONTAMANIA £9.99
Deluxe Paint 5 is now available on CD-ROM or Floppy Disk.
DELUXE PAINT 5 £17.99
Blitz Basic 2.1 is now available on CD-ROM or Floppy Disk.
BLITZ BASIC 2.1 £17.99
Full Version available now inc. Networking & Amiga Emulation.
AMIGA FOREVER £39.99
Lightrom 4 £19.99
Lightrom Gold £14.99
Dem Rom £ 9.99
LIGHTROM 5 £29.99
Siamese RTG 2.1 CD £ 29.99
Elastic Dreams CD £ 49.99
AGA Toolkit £ 9.99
In-To-The-Net CD £ 9.99
The Learning Curve £ 19.95
Miami & In-To-The-Net CD £ 29.99
Personal Suite CD-ROM £ 4.99
Personal Paint 6.4 & Manual £ 4.99
Imagine 3D PD £ 14.99
Fusion (Mac Emulator) £ 49.99
PCX (PC Emulator) £ 49.99
Speccy '98 £ 14.99
Retro Gold £ 9.99
Epic Encyclopedia '97 £ 19.95
Amiga Desktop Video 2 £ 14.99
Magic Workbench Enhancer £ 9.99
Epic Collection 3 CD £ 14.99
NFA AGA Experience 3 £ 9.99
iBrowse (Full Version) £ 24.99
The Hidden Truth £ 19.95
Enc. of the Paranormal £ 14.99
3D CD 1 Objects £ 9.99
3D CD 2 Images £ 9.99
UPD Gold £ 14.99
TRADE & RETAIL DISTRIBUTORS FOR GTI, SCHATZTRUHE, CLOANTO, GRAPHIC DETAIL, INTERACTIVE, EPIC, SADENESS, PD SOFT, HISOFT, VULCAN, GUILDHALL LEISURE, AND AMIGA INTERNATIONAL.
International Distributors
SCHATZTRUHE
GTI

CU AMIGA MAGAZINE

JUNE 1998 • CONTENTS

Editorial
EDITOR Tony Horgan
DEPUTY EDITOR Andrew Korn
PRODUCTION EDITOR Russell Cox
STAFF WRITER Richard Drummond
TECHNICAL CONSULTANT John Kennedy
US CORRESPONDENT Jason Compton
DESIGN Seshan M, Charlotte Lepper
CONTRIBUTORS Larry Hickmott, Steve Bye, Mat Bettinson, Sjur Mathisen , Neil Bothwick, Jason Hulance, Mark Forbes, Dhomas Trenn, Harv Laser, Dave Stroud
PHOTOGRAPHY Ben Jennings
SCITEX MANAGER Sarah Best
SYSTEMS MANAGER Sarah-Jane Leavey

Advertising, Marketing & Management
PUBLISHER Andy McVittie
ADVERTISING MANAGER Marianna Masters
MARKETING EXECUTIVE Zoe Wharnsby
GROUP PRODUCTION MANAGER Emma Minford
AD PRODUCTION EXECUTIVE Natasha George
ADVERTISING ASSISTANT Annabel Green
FACILITIES MANAGER Robert McBride

CU Amiga Magazine
37-39 MILLHARBOUR, ISLE OF DOGS,
LONDON E14 9TZ, UNITED KINGDOM
0171 972 6700
GENERAL@CU-AMIGA.CO.UK
WEB SITE: www.cu-amiga.co.uk
SUBS ENQUIRIES: 01858 435350
ADVERTISING PRODUCTION FAX: 0171 972 6755

Contacts

READERS' LETTERS AND TECHNICAL PROBLEMS: For general, non-technical, enquiries send your letters to the address above clearly marked for **BACKCHAT**. For technical problems send them clearly marked **Q&A**. Because of the nature of many enquiries they cannot be answered by phone. You can E-mail us at **backchat@cu-amiga.co.uk or Q+A@cu-amiga.co.uk.**

PD REVIEWS: We get hundreds of new PD programs every week, but we're still hungry for more. If you've written a PD program that you're proud of send it to: **PD SUBMISSIONS, CU Amiga Magazine, 37-39 Millharbour, Isle of Dogs, London, E14 9TZ.**

ADVERTISING OR ADVERTISING PROBLEMS: If you wish to advertise in CU Amiga Magazine, please contact **Marianna Masters** on the above telephone number and address. Contact **Annabel Green** if you have a query regarding any advertisement in CU Amiga Magazine.

COVER DISK PROBLEMS: If you have a faulty cover disk then write or return your disk to our duplicators: **DISKXPRESS, 7 WILLOW COURT, BOURTON INDUSTRIAL PARK, BOURTON-ON-THE-WATER, GLOUCESTERSHIRE GL54 2HQ. TEL: 01451 810788.**

COMPETITIONS: CU Amiga Magazine often runs competitions. To enter one of these simply put your name and address on the back of postcard, along with the answers and send them to us at the usual address (unless otherwise stated in the competition). Competition entries are only accepted by post. One entry per person please and the editor's decision is final. Winners will be notified by post. Other rules may be printed from time to time.

BACK ISSUES: 01858 435 350. Subject to availability. DD disk issues: UK price £5.99 (inc P&P). Rest of world £6.50. CD-ROM issues: UK price £6.99, Europe and Rest of world £7.50.

SUBSCRIPTION DETAILS: Subscriptions are available from Tower Publishing, Tower House, Sovereign Park, Lathkill Street, Market Harborough LE16 9EF Tel: 01858 435 350 . Annual subscription rates (inc postage) 12 issues: UK/BFPO £54. SURFACE MAIL ROW & EUROPE: £68.00. AIRMAIL EUROPE £70.00. ROW AIRMAIL £90. See subs page for special offers.

PRINTED IN THE UNITED KINGDOM BY SOUTHERN PRINT WEB OFFSET, POOLE.
COVER DISK AND CD-ROM DUPLICATION BY DISKXPRESS

ABC July-December 1997 24,358

emap. images

Editorial



I like the month of May. For one thing, I get to celebrate my 21st birthday again. Then there's the FA Cup Final. Jossling with the big day at Wembley there's the World of Amiga show, complete with a big screen for us to watch the match on. Oh, and summer comes around too, which is nice. Apart from those of you in the Southern Hemisphere (although it will probably be your summertime when this reaches you). So what's my point? What am I going on about? Don't ask me, I'm just the Editor. They pay me to do all this stuff, tinker with all the latest toys and tell you about them. I suppose I'm just full of the joys of spring.

Tony Horgan, Editor

Feature



Now there's no excuse for not making your own games! Not only have we got all the development software you could wish for on the cover disks and CD, we've also been chinwagging with the professionals to find out the secret to knocking out award winning games. Taking you through the complete process, this will have you chomping at the bit to do it yourself.

Feature



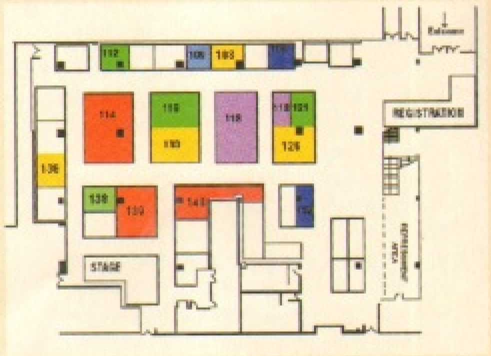
It's pink and soft and smells a bit funny. But enough about Russ Cox's problems, what about Spam? It promises riches beyond belief, the date of your dreams, even the opportunity to perpetuate the misery by bulk emailing millions of people around the world for $100.

It can drive you mad, and if you're not careful, probably will do very soon. If you're to retain your sanity you should read up on it as much as possible...

Feature

The time is almost upon us. This year's World of Amiga show looks like being one of the most exciting in recent years with an impressive line up of new products on show and on sale.

Get yourself prepared with our guide to all the key attractions and a complete floor plan so you won't get lost between the bar and the Gents. Find out who will be where, what will be hot and what bargains you should look out for on page 36.




Quake 42


Power Digital Camera 64



ImageFX 3.0 50


Sirius Genlock 59

Cover disks

14 Super CD-ROM 23

There's a bit of a game creation theme to the CD this month. As well as the full Reality Game Engine there's advanced development tools, SEUCK and all the latest shareware, reader contributions, samples, mods and utilities, plus an MPEG audio recording of Petro's speech at a recent Amiga show.



18 Reality Game Engine

All you need to make your own Amiga games, the Reality Game Engine is here and fully functional. Created with ease of use in mind, it could be your first step towards producing that award-winning game.

No programming knowledge is required. Now anyone can turn their game ideas into reality.



World of Amiga
16 - 17 May

All prices include VAT

Special Offer

3.5" SEAGATE HD 850MB £89.95
INC.STACK CABLE & INSTALL S/W

FLOPPY DISK DRIVES



A500 INTERNAL DRIVE £34.95
A600/A1200 INTERNAL DRIVE £34.95
A2000 INTERNAL DRIVE £39.95
PC880E EXTERNAL DRIVE £39.95
XL 1.76MB EXTERNAL DRIVE £65.95
XL 1.76MB INT. DRIVE A4000 .... £60.95

iOMEGA ZIP DRIVE



- Inc. cable and Zip tools s/w, 1 cartridge

ZIP DRIVE 100MB SCSI* £135.95
ZIP DRIVE INCLUDING SQUIRREL . £169.95
ZIP DRIVE IDE INTERNAL £149.95
100MB ZIP CARTRIDGE £14.00
*REQUIRES SQUIRREL SCSI INTERFACE

Modem Bundles

MODEM ONE BUNDLE



- 56.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet

MODEM BUNDLE ONE £99.95

MODEM TWO BUNDLE



- 56.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet
- Whippet fast serial interface A600/1200

MODEM BUNDLE TWO £119.95

MODEM THREE BUNDLE



- 56.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet
- Surf squirrel SCSI-2 serial interface for A1200 PCMCIA connection

MODEM BUNDLE THREE £169.95

GVP PRODUCTS

NEW LOW PRICES



GVP HC-8 SCSI INTERFACE £99.95
GVP GURU ROM V6 NEW REVISION . £49.95
GVP DSS-8 SOUND SAMPLER £59.95
GVP 4MB RAM MODULE £59.95
GVP 16MB RAM MODULE £99.95
GVP A1200 SCSI INTERFACE £59.95
FOR ALL A1200 ACCELERATOR CARDS



CE

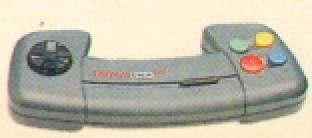
MISCELLENOUS

POWERTAB - GRAPHIC TABLET ... £159.95
ZIP RAM STATIC COLUMN PER MB . £16.95
BREATHLESS 3D GAME £15.95
BIG RED ADVENTURE CD-ROM £19.95
HEAVY DUTY PSU 200 WATT £69.95
OFFICIAL AMIGA MOUSE AND MAT .. £9.95

BEWARE OF NONE CE PSU'S

"The Rolls Royce of PSU's"
AMIGA FORMAT





JOYPAD OFFER

- Joypad, for use with many games

GAMES JOYPAD £14.95

HARD DRIVES

- Inc. cable and software and fitting screws

2.5" HARD DRIVE 1.3GB £129.95
2.5" HARD DRIVE 1.6GB £169.95
2.5" HARD DRIVE 2.1GB £189.95
3.5" HARD DRIVE 1.7GB £129.95
3.5" HARD DRIVE 3.2GB £169.95
STACK CABLE FOR THE 3.5" HD ... £12.95
3.5" HD's recommended for A1200 Tower
EXTERNAL SCSI HD 2.1 GB £249.95
INTERNAL SCSI HD 2.1 GB £199.95

CYBERVISION 64-3D CARD

- Hi-res 64-bit graphic card
- 4MB of display memory
- For the A2000/3000(T)/4000(T)

CYBERVISION 64-3D CARD £159.95
SCANDOUBLER CYBERVISION £69.95

VIDEO BACKUP DEVICE

£20.00



- Backup 520MB onto a 4HR VHS tape

VIDEO BACKUP - PHONO £20.00
VIDEO BACKUP - SCART £20.00

Amiga Scanners

FLATBED SCANNERS

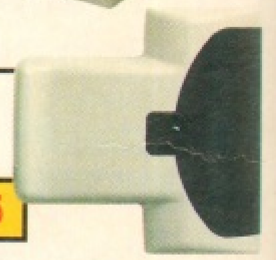


- Epson A4 Flatbed Scanner
- 24-bit colour scanning
- Greyscale and line art modes
- OCR software available at £20

EPSON GT-5000 SCANNER £219.95
EPSON GT-5000 + SOFTWARE £249.95

HAND SCANNERS

£59.95



- Includes interface and software
- Colour scanner is AGA 24-bit/400DPI

POWERSCAN BLACK & WHITE £59.95
POWERSCAN COLOUR INC. OCR S/W £99.95
SCANNER OCR SOFTWARE £20

Epson Printers

EPSON STYLUS PRINTERS

£39.95



- Includes Turbo Print LE and cable

EPSON 600 A4 1440DPI COLOUR £239.95
EPSON 800 A4 1440DPI COLOUR £289.95
TURBO PRINT 6 FULL VERSION .. £39.95
TURBO PRINT 6 LE VERSION £25.95

CATWEASEL MK2

£49.95



- A4000/1200 high density drive controller
- Allows you to connect any PC Drive

ORIGINAL A4000 KEYBOARD/INTERFACE £40

NEW POWER IO-EXTENDER INTERNAL

POWER PORT JUNIOR (1 x high speed serial) £39.95
POWER PORT PLUS (1 x parallel, 2 x serial) £69.95
POWER PORT Z3 (2 x parallel, 1 x serial) ... £65.95
A2000/4000 ONLY (ZORRO II/III)

VISA

01234 851500
FAX 01234 855400
UNIT 82A SINGER WAY
KEMPSTON MK42 7PU
Visit our web site www.powerc.com
Email sales@powerc.demon.co.uk

POWER
COMPUTING LTD

The New A1200 Power Tower

A1200 POWER TOWER

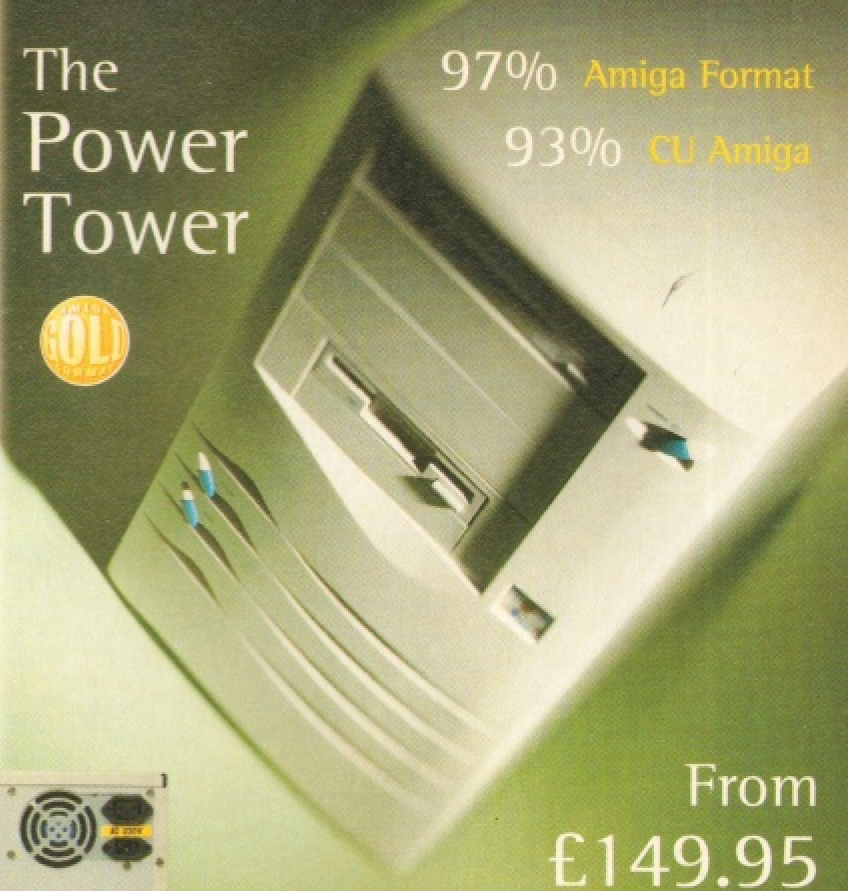
- Includes 200 watt PSU
- PC Keyboard
- PC Keyboard Interface
- Floppy drive facia - floppy cable
- All screws, port labels and mains lead

A1200 POWER TOWER 1

- Power Tower and Keyboard
- A1200 Main board
- Floppy disk drive
- 3.1 Workbench
- 3.1 Manuals
- Wordworth 4.5SE
- Turbocalc 3.5 Spreadsheet
- Datastore 1.1 Database
- Photogenic 1.2se
- Personal Paint 6.4 & Organiser 1.1
- Pinball Mainia game & Wizz game

A1200 POWER TOWER 2

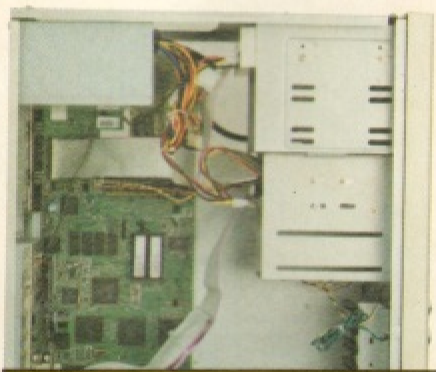
- Power Tower
- Keyboard
- A1200 Main board
- 24x Speed IDE CD-ROM
- 2.1GB Hard drive
- Apollo 1240 25MHz 16MB
- 4 way IDE interface/IDEFix97 software
- Floppy disk drive
- 3.1 Workbench
- 3.1 Manuals
- Wordworth 4.5SE
- Turbocalc 3.5 Spreadsheet
- Datastore 1.1 Database
- Photogenic 1.2se
- Personal Paint 6.4 & Organiser 1.1
- Pinball Mainia game & Wizz game



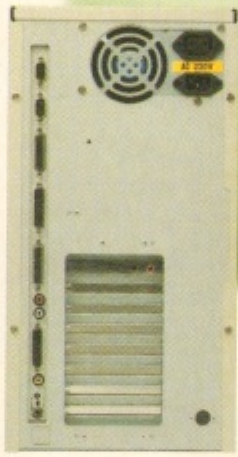
A1200 POWER TOWER **£149.95**

A1200 POWER TOWER 1 **£359.95**

A1200 POWER TOWER 2 **£759.95**



WE CAN MANUFACTURE ANY CABLE - CALL FOR A PRICE





All Power Towers are assembled by Power Computing

All prices include VAT. See DPS ad for terms and conditions

A1200 POWER TOWER ACCESSORIES

Item	Price
Zorro (5PCI, 2 ISA, 2 Video Slots option)	£149.95
Zorro III (5 PCI, 2 ISA, Video (option), A4000 CPU Slot	£319.95
PCMCIA V Adaptor - allows squirrel to be fitted internally	£29.95
External Audio Port for internal CD-ROM (needed for listening to Music CD's and games that use CD audio)	£15.95
SCSI-I Adaptor - Internal 50 way pin header, external 25 way connector	£19.95
SCSI-II Micro high density connector. Internal 50 way pin header, external micro HD connector	£25.95
SCSI-III 3-Way Ultra Wide internal connector, external micro HD connector	£45.95
SCSI-III 7-Way connector	£69.95
SCSI-III Terminator	£39.95
4 Way IDE Interface (buffered) & IDEFix '97 software	£30.95
3 Way IDE ribbon cable (suitable for HD's, CD-ROM)	£9.95
3 Way SCSI 50 pin header (suitable for HD's, SCSI CD-ROM)	£15.95
Iomega ZIP drive - Internal inc. cable IDEFix software, Power Zip Tools, 100MB Cartridge and IDE 4 way buffered interface	£149.95
Panasonic LS120 External - 120MB floppy drive. Also recognises 1.44MB discs. Inc. cable, IDEFix software, 120MB disc and IDE 4 way buffered interface (AF Gold 92%)	£149.95
Panasonic LS120 Internal - Spec as above	£129.95
Panasonic LS120 Internal - No IDE Fix	£95.95
Panasonic LS120MB Floppy Disk	£12.95
25 Watt (PMPO) Typhoon speakers inc. adaptor cable	£19.95
260 Watt (PMPO) Typhoon speakers inc. adaptor cable	£49.95
200 Watt (PMPO) Typhoon subwoofer and control box	£55.95
PC Keyboard Interface	£29.95
Printer Switchers - In Stock	£CALL





AMIGA 1200 MAGIC PACK

- 2MB RAM 68020 14.3MHZ
- AGA CHIPSET
- WORDWORTH 4.5SE (WORDPROCESSOR)
- TURBOCALC 3.5 (SPREADSHEET)
- DATASTORE 1.1 (DATABASE)
- PHOTOGENIC 1.2SE/PERSONAL PAINT 6.4
- ORGANISER 1.1 (PERSONAL ORGANISER)
- PINBALL MANIA (GAME)

AMIGA BUNDLE ONE

AMIGA BUNDLE ONE INCLUDES:

- AMIGA 1200 MAGIC PACK
- 4MB RAM INCLUDED

AMIGA

POWER ARE OFFICIAL SUPPLIERS OF THE AMIGA 1200



AMIGA 3.1 OPERATING SYSTEM INC.

- ROM CHIP, SOFTWARE AND MANUAL

Item	Price
A1200/3000 3.1 OS	£45.95
A500/600/2000 3.1 OS	£39.95
A4000 3.1 OS	£45.95
A500/600/2000 3.1 CHIP ONLY	£25.95
A1200/4000 3.1 CHIP ONLY	£29.95



AMIGA A4000 TOWER IDE/SCSI INCLUDES

- 32MB RAM ON-BOARD
- 1.7GB HARD DRIVE, 3.01 OS
- 68040 25MHZ PROCESSOR

A4000 TOWER £1099

01234 851500

FAX 01234 855400

UNIT 82A SINGER WAY
KEMPSTON MK42 7PU

Visit our web site www.powerc.com

POWER COMPUTING LTD

POWER COMPUTING

http://www.powerc.com

Apollo 68030

- A2000 68030-50MHz
- Upto 64MB RAM
- FPU optional

Bare £169.95
Inc. FPU £199.95



Apollo 68040

- A1200 68040 Accelerator

Apollo 1240 25MHz ... £129.95
Apollo 1240 40MHz ... £189.95

Apollo 68060

- A1200 68060 Accelerator

Apollo 1260 50MHz £269.95
Apollo 1260 66MHz £319.95
66MHz is clocked up

Viper MK2

- A1200 68030 40MHz
- Full MMU and 40MHz FPU

Viper MK2 Bare £79.95
Viper MK2 8MB £94.95
Viper MK2 16MB £104.95
Viper MK2 32MB £119.95
Viper MK2 64MB £199.95



Viper 520CD

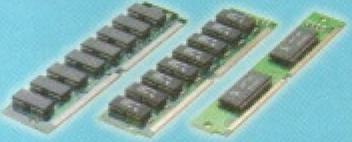
- A500 Accelerator Card
- 68020EC 33MHz without MMU
- PGA FPU Socket 33MHz Only
- Space for IDE 2.5" Hard Drive
- 2 x 40-Pin CD-ROM/HD Socket
- 8MB RAM On-board
- 3.0 ROM inc. software
- Fat Agnus slot to fit mini-chip

Viper 520CD £99.95



Memory Simms

4MB 72-pin SIMM £9.95
8MB 72-pin SIMM £15.00
16MB 72-pin SIMM £25.00
32MB 72-pin SIMM £40.00
32MB Single side/Blizzard £89.95



1230 Turbo LC

- Not PCMCIA friendly
- IDE Buffered compatible
- 33MHz inc. 33MHz FPU
- Compatible with IDE CD-ROM

1230 Turbo 4MB £59.95
1230 Turbo 8MB £69.95



Blizzard 603e

- A1200 PowerPC Card
- 603e PowerPC with 68K CPU
- No SCSI, cannot be upgraded
- Up to 128MB RAM

160MHz with 68040/25 £259.95
160MHz inc 040/25 SCSI £299.95
200MHz inc 040/25 SCSI £359.95



Special Offer

Special FPU prices when purchased with any accelerator card.

20MHZ (PLCC) £10
33MHZ (PLCC) £15
40MHZ (PGA) £20
50MHZ (PGA) £29

Cyberstorm PPC

- A3000/4000(T) PowerPC Card
- 604e PowerPC with 68K CPU
- Ultra wide SCSI-3, inc. FPU/MMU

180MHz PPC No CPU .. £519.95
200MHz PPC No CPU .. £615.95
180MHz with 68040/25 £559.95
180MHz with 68060/50 £745.95
200MHz with 68040/25 £649.95
200MHz with 68060/50 £849.95

Viper 630

- A600 Accelerator Card
- 68030 33MHz Processor
- Up to 32MB RAM (1 x SIMM)
- FPU Included, PCMCIA friendly

A600 0MB 33MHz £75.95
A600 4MB 33MHz £85.95
A600 8MB 33MHz £95.95
A600 16MB 33MHz £115.95
A600 32MB 33MHz £150.95



2.5" Hard Drives

- Complete with 2.5" IDE cable
- Install Software, Fitting Screws
- Partitioned and Formatted
- For the A1200 Computer

1.3GB Hard Drive £129.95
1.6GB Hard Drive £169.95
2.1GB Hard Drive £189.95



ADC Monitors

- 1year on-site/2 year return to base warranty

14" Digital £124.95
15" Digital £155.95
17" Digital £319.95

Amiga Monitor

- Official 1084s inc. speakers

1084s Amiga Monitor ... £99.95



Digital Cameras

- Ideal for Web graphics!
- Comes complete with Amiga s/w

VDC100 Camera £99.95
VDC200P inc.LCD screen £199.95



New Product

Scan Magic

- Converts a VGA monitor to Amiga mode

Internal £54.95
Internal inc. Flicker Fixer £99.95



Scan Doubler

- AGA Mode 16 million colours
- Scandoubler mode 15MHz 16bit
- Interlace and non-interlace
- Works on any VGA monitor

External with Flicker Fixer £99.95
ScanDoubler External ... £69.95





CD-ROM FROM
£49.95

IDE CD-ROM

- For A1200/600, A500 call
- 4Way buffered interface + IDE'97*
- Chaos Engine*
- Oscar/Diggers CD-ROM*
- Power Supply Unit*



24x External £119.95
24x Internal £49.95
32x Internal £69.95

*Only comes with External CD-ROM drives. Internal drive is also suitable for the Power Tower system - requires IDE interface and IDE Fix '97

CD-ROM Bundles

- External CD-ROM Drive
- Squirrel PCMCIA SCSI Interface
- Chaos Engine CD-ROM
- Oscar/Diggers CD-ROM

4x External CD-ROM . . .£119.95
8x External CD-ROM . . .£149.95
12x External CD-ROM . .£169.95
24x External CD-ROM . .£199.95
32x External CD-ROM . .£229.95

Int. SCSI CD-ROM

4x Internal CD-ROM £54.95
8x Internal CD-ROM £84.95
12x Internal CD-ROM . .£104.95
24x Internal CD-ROM . .£134.95
32x Internal CD-ROM . .£164.95
CD-ROM comes with 3 way SCSI cable



SLIMLINE EXT CD
£79.95

Slimline CD-ROM

- Squirrel PCMCIA SCSI Interface
- External Power Supply Unit
- Chaos Engine CD-ROM
- Oscar/Diggers CD-ROM

A1200 4MB RAM

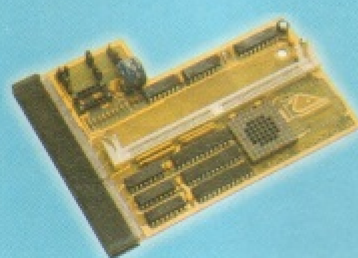
- 4MB only not upgradable

A1200 4MB RAM £39.95
40MHZ FPU £15.00



A1200 0-8MB RAM

- MByte 32-bit zero wait state Fast-RAM
- Auto-recharge battery clock
- Socket for PGA FPU 68882 up to 50MHz
- Fully auto-configuring Chip-RAM
- Fits easily into the trapdoor
- 4MB PCMCIA compatible (not 8MB)

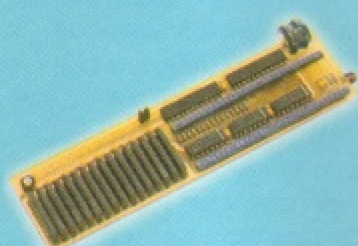


4MB RAM £45.95
8MB RAM £55.95
40MHZ FPU £15.00

CDTV 2MB RAM

- Inc.2MB zero wait state Fast RAM
- Auto-recharge battery clock
- Fits easliy into the CPU socket
- Fully Auto-configuring RAM
- Increases the speed of your CDTV

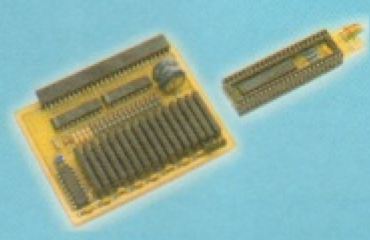
CDTV 2MB RAM £49.95



Mini Mega Chip

- 1MB of Chip RAM

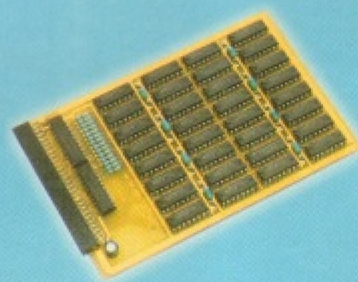
Mini Mega Chip £99.95



A500 2MB RAM

- Factory installed 2MB RAM
- Auto-recharge battery clock
- Fully auto-configuring RAM
- Works with all A500's WB1.3 and above

A500 2MB RAM £49.95



A500+ 1MB RAM

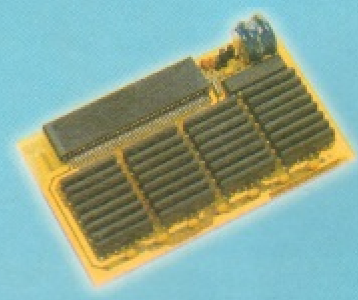
- 1MB CHIP RAM
- Fits into the A500+ trapdoor
- Fully auto-configuring Chip RAM
- Works with all A500+

A500 1MB CHIP RAM . . .£19.95

A600 1MB RAM

- 1MB CHIP RAM
- Auto-recharging battery clock
- Fits into the A600 trapdoor
- Fully auto-configuring Chip RAM
- Works with all A600 & A600HD

A600 1MB CHIP RAM . . .£24.95



POWER COMPUTING

Order Form

NAME.................................... ADDRESS..
............................POSTCODE.................TEL No. ....
ITEMS..
TOTAL (INC.DELIVERY) £.. CREDIT CARD No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
SIGNATURE .... EXPIRY ISSUE No...................................
DELIVERY 2-3 DAYS £5.00 ☐ NEXT DAY £8 ☐ SAT £15 ☐ SUBJECT TO PRODUCT AVAILABILTY

sales@powerc.demon.co.uk

PHONE **01234 851500** FAX 01234 855400

POWER COMPUTING LTD
UNIT 82A SINGER WAY
KEMPSTON MK42 7PU

VISA MasterCard

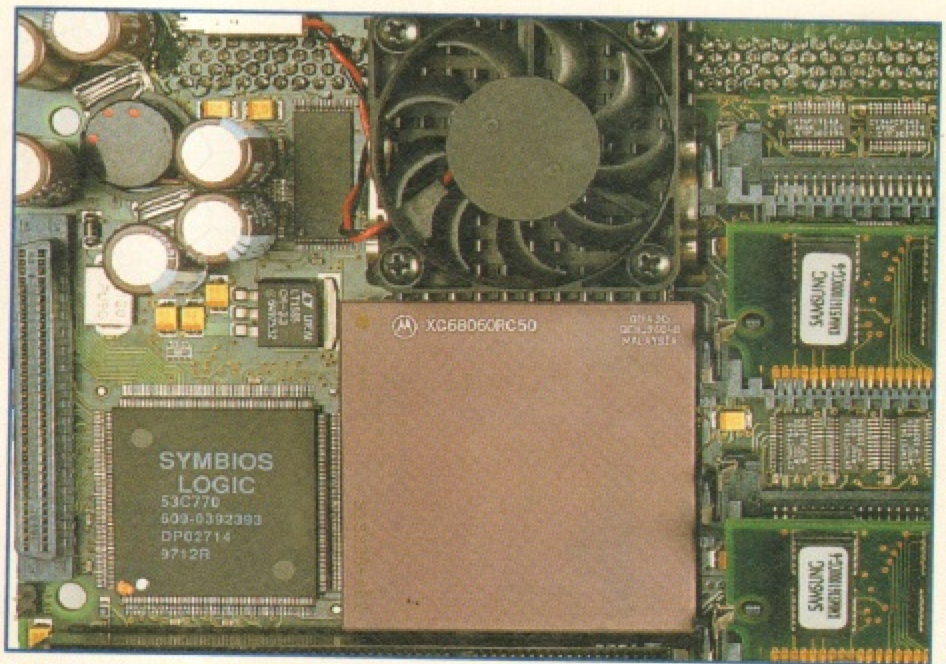


News

Worldwide 68060 Shortage

Products utilising the top of the range Motorola 68060 processor are suffering delays due to availability problems. phase 5 were forced to delay the launch of the '060 variant of the Blizzard PPC card for several weeks due to this shortage, and their next batch of 68060 chips is not expected to last beyond their current backlog of orders. While small stocks of 68060 chips apparently remain in the hands of Amiga companies such as Paxtron in the USA and ACT in Germany, the shortages are being felt throughout the industry, with 68060 based products becoming very hard to find.

CU Amiga Magazine has been hearing numerous complaints in the last few weeks from companies who are struggling to fulfil demand for these processors, and from end users who have been unable to get the accelerator cards they want. According to Motorola, they actually have large stocks of the wafers but are not able to prioritise the assembly of the wafers into cases. The changeover of the LC and EC components to spare 0.42 fabrication has caused problems in the normal process of assembly for the RC components used in computers, and recent large orders for the cut down parts from industry users of the '060 have overstretched the capacity of the casing facilities.



▲ The CyberstormPPC card, with one of the increasingly rare 68060 CPUs.

A spokesman for the company assured CU Amiga Magazine that they were trying to break the backlog as soon as possible, and that phase 5, as the largest user of the CPU in Germany, were top priority when the chips start leaving the factory again.

MOD turns to Amiga

The Royal Navy has awarded a contract to Thorn electronics for 20 on ship weather satellite download systems after the company's Amiga based proposal beat five other tenders from companies using Macintosh or PC hardware. The Amiga based systems will consist of A4000 motherboards in 19" rack mountings with Ram, hard drives, CyberStorm '060 cards and Picasso 4 graphics cards.

The Amiga based bid won because the system simply outperformed the other ones.

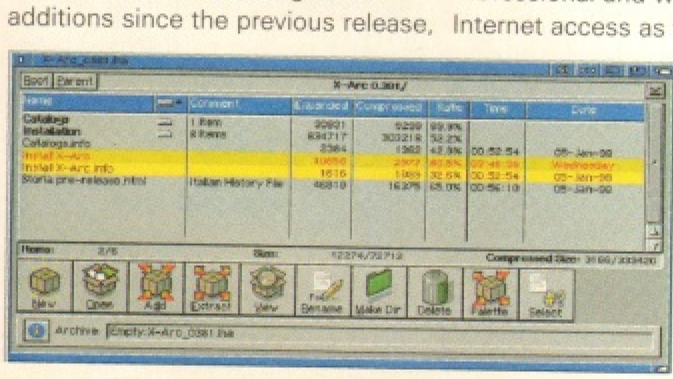
The naval contractees were apparently impressed by the ability of the Amiga system to smoothly multitask the satellite downlink, 3D weather mapping and printer plotter control, and were particularly taken by the fact that the Amiga based systems can completely reset themselves within 20 seconds.

White Knight Technologies have been asked to supply the hardware, although current shortages in '060 cards and A4000Ts has made the task harder than they had hoped.

And, finally, NetConnect v2

Active Technologies will finally release the CD version of NetConnect v2 in May.

There are many changes and additions since the previous release, not least that it will ship with a new TCP stack called "Genesis". Genesis is based on the original AmiTCP Professional and will allow dial-up Internet access as well as local area networking or both (due to its unique ability to open multiple interfaces).



X-Arc is another new edition for version 2. Similar to WinZip on Windows or StuffIt on the Mac, it brings advanced archive management to the Amiga via a central control interface. Download an archive from the Internet and it is automatically extracted into the X-Arc main window where you can edit, view, copy or run any of the files from within the archive.

NetConnect is available for £59.95 from Active Technologies. Genesis and X-Arc may also be purchased separately. Call Active for further information on: 01325 460116.

Seminars at WOA98

Amiga Inc., the Industry Council Open Amiga (ICOA) and AmigaSoc UK will be holding a series of technical and non-technical Developers seminars over both days of the WOA98 Show.

ICOA members will be admitted free to the seminars, while a nominal fee will apply to anybody else. Bookings can be made to andrew@uk.amigasoc.org. Use the same address if you are interested in holding a seminar yourself.



It's Siamese Systems, now

Existing and potential customers of the Siamese System will have a new company to talk to – Siamese Systems Ltd. of Bedfordshire.

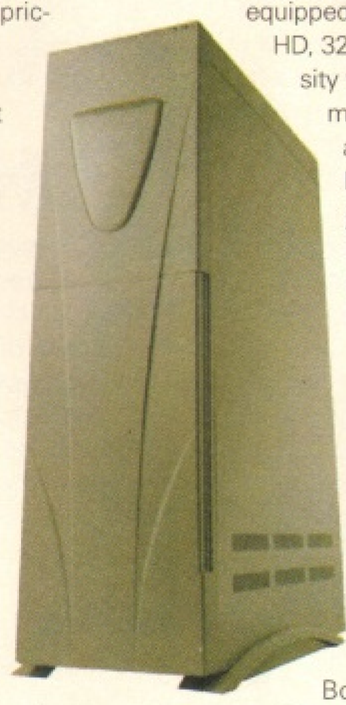
The original publisher of the Siamese System, HiQ, has ceased trading. Siamese Systems is honouring its previous customer obligations and consists of essentially the same personnel with new contact information.

The first move of the newly formed Siamese Systems is the wide availability release of Siamese Remote Amiga v2.1 serial edition, available from Siamese Systems direct or several dealers world-wide for £29.95 / $49.95 US / 79DM.

Siamese remote is basically the full Siamese 2.5 software with the TCP/IP stack removed. It has the full retargetable capabilities, but functions only over a serial connection.

The idea of the release is to act as a power users rival to current Amiga-PC networking solutions and as a way in to the Siamese system for those who aren't sure what they are getting. Purchasers of the Siamese remote release CD from Siamese systems will be entitled to a full refund against a purchase price of the v2.50 pro Siamese Ethernet system, which is up to 50 times faster than serial in certain operations. Siamese Systems Ltd. can be reached on 01525 211558, or at http://www.siamese.co.uk.

BoXeR pricing announced



Blittersoft, the UK distributors of the BoXeR AGA motherboard from Index, have announced pricing for the imminent release of the first production run of the latest entry into the Amiga clone market. The pricing has worked out rather higher than initial projected estimates. A bare BoXeR motherboard (includes AGA chipset and 2 Megs of Chip RAM) will be £479.95 inclusive of VAT (just under £410 exclusive). You need to provide the 040 or 060 CPU. Blittersoft have said that they really want to emphasise BoXeR based systems rather than the motherboard as a DIY component, and pricing of their Black Box series of complete systems brings the value of the BoXeR into a little more perspective. Fully equipped (32 megs RAM, 4 gig HD, 32X CD-ROM, high-density floppy as well as mouse and keyboard in a tower case), the Black Box 040 is projected at £899.95 inclusive, with an 060 model adding £100. Compared to a similarly specced A4000t, the prices look rather good, and specs are higher. The BoXeR technology will be on display at the World of Amiga and is expected to ship (both in motherboard and Black Box form) in August of this year. For more info contact Blittersoft on (0)1908 261466, or at http://www.blittersoft.com.

Petro Speaks in Finland

Saku 98, an event organized by the Finnish Amiga Users Group on March 28, was the biggest Amiga only event in Finland in years and has been officially described as a success. Petro Tyschtschenko speech from the show may be heard on this month's CD-ROM, but more interest was aroused by Petro's unveiling of the New Amiga Hymn, featuring the lyrics "Back for the future". For further information, visit Finnish Amiga Users Group's Web Site at:
http://batman.jytol.fi/~saku/ or
http://tzimmola.tky.hut.fi/saku/.



Petro shows off his new car.

Exploring New Horizons

2260 Designs, the software team working on Explorer 2260 and Maim & Mangle are undertaking another project called New Horizons. This is a management game set in the same TWF Universe as their other projects and casts the player in control of a space station.

Current system requirements are an Amiga with 020 or better, 6Mb RAM, hard drive, and a CD-ROM. There are also plans to support graphics card, PPC board and possibly even network gaming.

2260 Design require a programmer to develop this title. They say: "The person we are looking for must have experience in system friendly utility/games programming, GFX card support, 3D coding and if possible TCP/IP support.

Anyone who wants to apply must be able to dedicate a lot of their free time to the project. Information on any previous projects is required. The person will be expected to do the majority of the programming for the game and will also be required to co-ordinate a small group of coders who will help with various tasks."

Anybody interested should contact the team via email at korhonen@zetnet.co.uk or via snail mail at: 2260 Designs, 14 Holyrood Crescent, Hart Village, Hartlepool TS27 3BB, ENGLAND. They also have a website at http://www.users.zetnet.co.uk/korhonen/.

White Knight/PPC trade-in deals

White Knight Technologies, the Amiga specialist and phase 5 dealer, are now offering trade-in and upgrade deals on phase 5's range of Blizzard PPC accelerators for the Amiga 1200. If you already have an 040 or 060 chip, White Knight will supply bare PPC boards for the same price as the LC040 version, ie; the 160MHz P603 for £235, the 200MHz for £289, and the 240MHz for £355. They will supply the SCSI version at £289 for the 160MHz, £345 for the 200MHz, and £409 for the 240MHz.

If you have a phase 5 Blizzard 1240 or 1260 accelerator with the CPU soldered-in, you can send the board to White Knight and they will transfer the CPU to a PPC card for a handling charge of £20. They claim a turn-around time of 2-3 weeks for this process.

Also, White Knight offer trade-in deals to registered owners of Blizzard 1230 cards. They will knock £30 off the price of a PPC board in exchange for a 1230 and £20 pounds for a Blizzard SCSI board.

White Knight may be contacted on: 01920 822321.

Made For KiDs

Mystique Corporation International, the host of the Amiga's Premier Children's Site, have overseen the creation of a new folder on Aminet solely for children's software as part of their on-going Made For KiDs campaign. Their own website, at http://www.mystcorp.u-net.com, features a carefully designed interface to ease the access of this new archive, providing the user with all relevant information and simplifying the download process.

Amiga International and Haage&Partner have both sponsored MystCorp, supporting their efforts to ensure that the Amiga is the computer of choice for children and education. H&P have donated a copy of their StormC and AI have supplied an A4000T to aid Mystique's developments – which include the project CP, which MystCorp claim "is the most advanced, feature-packed kid's package currently available on any platform." MystCorp are based in Belfast, Northern Ireland, and may be contacted at: +44 (0) 1232 808 369.

Haage & Partner new editions and additions

Haage & Partner are now shipping the latest version of Tornado3D, the ray tracing package from Italian developers Eyelight.

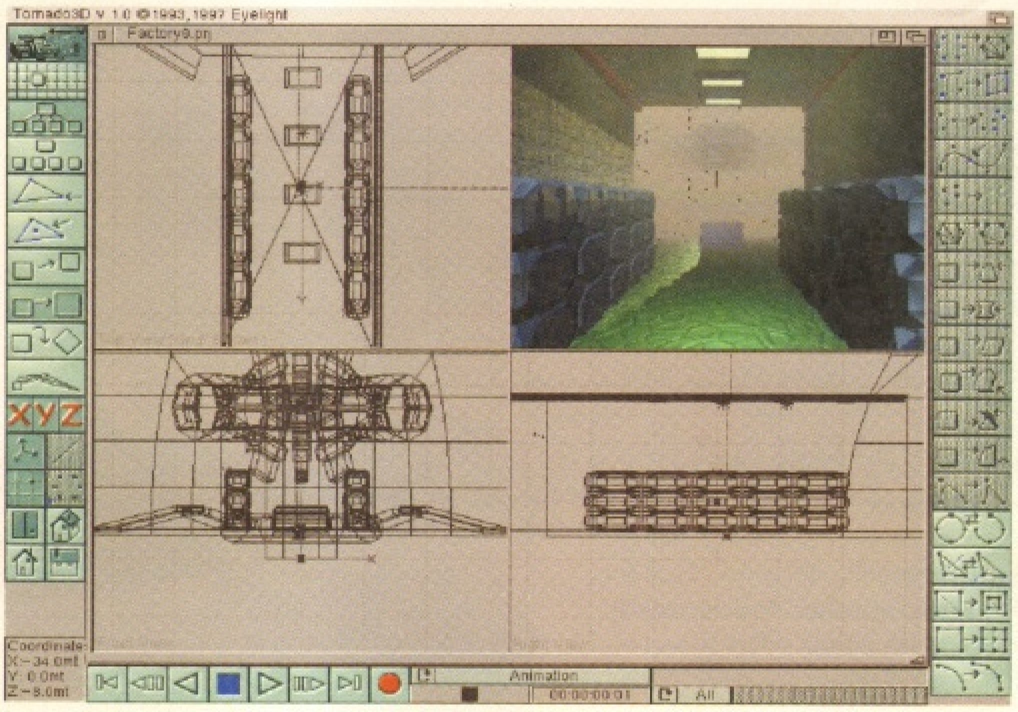
New features in V1.5 include a real-time colour preview function for WYSIWYG rendering and full support for the Virge 3D accelerator in the Cybervision 64/3D graphics boards for enhanced performance. Registered users will receive the upgrade free of charge. There will be a full review of this exciting product in next month's issue. More information can be found at http://www.tornado.com.

Haage & Partner are also improving their customer support by hiring five new members of staff in this department. These new personnel will handle phone and e-mail queries from users and administer H&P's various mailing lists.

International Amiga 98

North America's foremost Amiga event, International Amiga 98, will be taking place on the 29th and 30th of May at the International Plaza Hotel in Toronto, Canada. Admission price for both days is $15CAD, but you can save $5 off this price by registering beforehand with Randomize, the show's hosts. This not-to-be-missed event will have exhibitors such as Amiga International, Phase 5, Nova Design and Newtek and will feature classes held Amiga personalities such as Amiga International's Joe Torre and Jason Compton of Amiga Report and CU Amiga.

For more information visit the IA98 website at http://www.randomize.com/ia98.html or phone Sylvia Bevan 905-939-8371.



Tornado3D ▲

Advertisers Index

News in Brief

Stickers at last!

OK, we give in. After months of harassment by you guys, we've got together with Amiga International to bring you Powered By Amiga Stickers to put on those unmarked tower cases, or wherever else you fancy. Check in next month's issue for your free sticker!

New look for Amiga International web site

Amiga International have updated their website to give it a more professional look. Changes include revised layouts and graphics, frames and no frames versions, a new index structure and some new sections. This site can be found at: http://www.amiga.de.

SCALOS released

SCALOS, the Workbench replacement system from Alien Design, the team responsible for the ubiquitous MCP, has been released at last.

Features include full multitasking, an icon datatyping system with NewIcons support, and extensive configurability. The registered version of SCALOS, available for 30DM, emulates WB with compatibility claimed at 99.9%. Details are available from: http://www.aliendesign.net

Cut-price UniverseDigital

Universe v1.03, the award-winning astronomical simulator package from Syzygy, is now available on CD-ROM for half-price. Syzygy say, 'With our new lower price, we expect the software to become more accessible to the casual astronomy enthusiast.' This new CD-ROM distribution, with no printed manual or box, ships for $75CD which exchanges currently to about £31.

Syzygy are also offering discounts of $10 for bulk orders of 5 copies or more. More information on Digital Universe can be found at: http://www.syz.com/DU/amigacd.html.



Stateside News

by Jason Compton: Editor in Chief of Amiga Report Magazine

ICOA Fumbles Election

The ICOA (Industry Council Open Amiga) is the latest in a series of populist groups started to further the cause of the Amiga. The ICOA has been around in one form or another for over a year, and has operated under the leadership of the Temporary Steering Committee – a group of five Amiga luminaries, professionals, and enthusiasts.

The real steering committee was to be elected after the temporary version got the group operational, and by some accounts, it is: the ICOA is a registered corporation, has made speeches and held discussions around the world, and has a website.

However, the election of the first steering committee member has not gone smoothly. The position of "User Representative" included a joke candidate, and the results have been mysteriously held up due to "irregularities." The final result was marred by claims of fraudulent votes and a three way tie, and after hasty negotiations, a new round of elections have been announced.

Nominations for the next round are open until 30th May. Entries must include contact details for the nominee and five supporters, along with a statement from the nominee agreeing to the terms of the election and the decisions of the arbiters, and a statement of not more than 500 words detailing the nominees position which will be posted to the ICOA website.

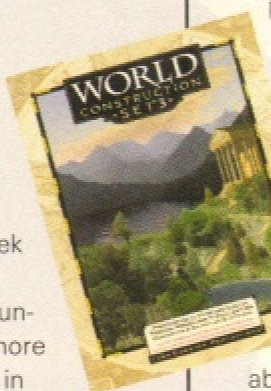
Postal entries may be made to:

USA/Canada: **Andrew Bienhaus, 90 Farr Crescent, Cambridge, Ontario N3C 1R6, Canada**

UK: **Ben Hutchings, 19 Lewell Avenue, Oxford OX3 0RL**

If you have internet access, you can check all the latest from ICOA at their website, www.amiganet.org/icoa/

Newtek Slashes Prices



In response to the growing field of non-linear editors and competing desktop video products, Newtek has slashed prices on Amiga Toaster/Flyer bundles. What's almost more interesting is the way in which they announced it.

The price of a 4000T with Toaster and Flyer installed is an all-time low US$5000. (Previously, a comparable system sans Amiga could run that much, or more) At the other end of the spectrum, a Video Toaster 4000 is just US$1000. These levels of prices may make the systems more attractive for European use even with the need for an external NTSC/PAL conversion.

What has caught many eyes is the fact that Newtek's price announcement explicitly mentions an Amiga 4000T – for years, Newtek has been accused, for good reason, of obscuring or hiding the fact that their flagship product relies on Amiga technology.

Newtek can be reached at +210-370-8000, www.newtek.com

World Construction: More Than 6 Days

Questar Productions' World Construction Set V2 has been promised for Amiga release for some time. WCS 2 would put the likes of VistaPro and Scenery Animator to shame. A prerelease version was put on the market two years ago, with a number of features missing, incomplete, or broken. Questar promised a full upgrade would be available promptly, and turned their attention to a port to other platforms (Intel and Alpha). The clock has marched forward, and a few natives have begun to get restless. A call to the Questar team cleared up a few issues.

A new version of WCS for the Amiga will be made available. The source code has apparently been mostly rewritten due to extensive changes made from the Amiga to the PC version. The eventual release of a full WCS will be essentially identical to the PC/Alpha versions and similar to the planned feature list of WCS 2. PowerPC support is planned, but may not be available immediately.

For more information, contact Questar Productions at +303-659-4028,www.questarproductions.com online.

Calendar Check



A quick look at upcoming Stateside Amiga events:

■ **International Amiga '98** (May 30-31, Toronto, Canada) It's not too late to visit beautiful Ontario and take in a couple of days of Amiga madness, hosted by Randomize Distribution. In addition to the usual gang of American and Canadian firms, Phase5 and Oberland have been convinced to put in an appearance. (905-939-8371 or www.randomize.com/ia98.html for more information)

■ **AmiWest '98** (July 10-13, Sacramento, California) This show looks like it might be a smaller event than the others in the US this year, but if you need an excuse to see California, let this be it. The show promises to be heavy on seminars and classes. (916-369-7232 fax or www.sacc.org/amiwest/ for more information)

■ **Midwest Amiga Expo '98** (October 2-4, Columbus, Ohio) The MAE organizers may be trying to set a record for "biggest move upscale for an exposition over a two-year period." In '96, it was held in a suburban high school commons. This year, it will be at the downtown Hyatt. No exhibitor information yet, but last year was a good draw. www.amicon.org/mae.html for more info.

Super CD-ROM 23



Welcome to CUCD23. This CD is crammed full of programs, games, utilities, mods and a host of other goodies. If you don't yet have a CD drive, this is your reason to buy one. Prices have never been lower and 650MB of quality software each month is just too good to miss out on.

How much of what?

It's easy to miss where the real contents of a CUCD lies so here's a list of how much data lies in each directory. Headlining the CD is Game creation (see page 18 for a walkthrough guide). Apart from that there's more than enough to keep anyone going until next month, whether its graphics, offline web browsing, music, programming or tinkering with the many utilities and tools to be found on the disc.

- Making Games..............106MB
- CDSupport....................68MB
- System files...................12MB
- CDROM..........................11MB
- Demos............................32MB
- Games.............................44MB
- Graphics..........................69MB
- Kids..................................27MB
- Magazine.........................39MB
- Online..............................56MB
- Programming....................9MB
- Readers............................21MB
- Sound...............................72MB
- Utilities............................19MB
- WWW...............................32MB

Making the most of CUCD23



All CUCDs are designed to be used whether you boot from the CD or your normal Workbench. If you boot from the CD, everything is setup and ready to go. If you want to access the CD from your Workbench, you should first run InitCD. This sets up various assigns and paths needed by programs on the CD, so if you don't do it, things won't work. It doesn't make any changes to your system, or write any files to your hard drive, all changes are temporary and can be reversed by running InitCD again.

Your own custom CD

In the past you had to use whatever file viewers we set up on the CD. since these had to work with all Amigas they were quite limited. From CUCD12 we decided to allow you to specify how the CD should work on your Amiga and included CDPrefs in the CDSupport drawer. If you have never run this before you should be asked if you want to when you run InitCD. CDPrefs lets you specify which program you want to use to handle each type of file, graphics card users can view pictures in full 24 bit colour, ProjectXG users can listen to midi files through their midi card and people with sound cards can listen to mods with an AHI module player. It also means we were able to provide different defaults for Workbench 2.x users.

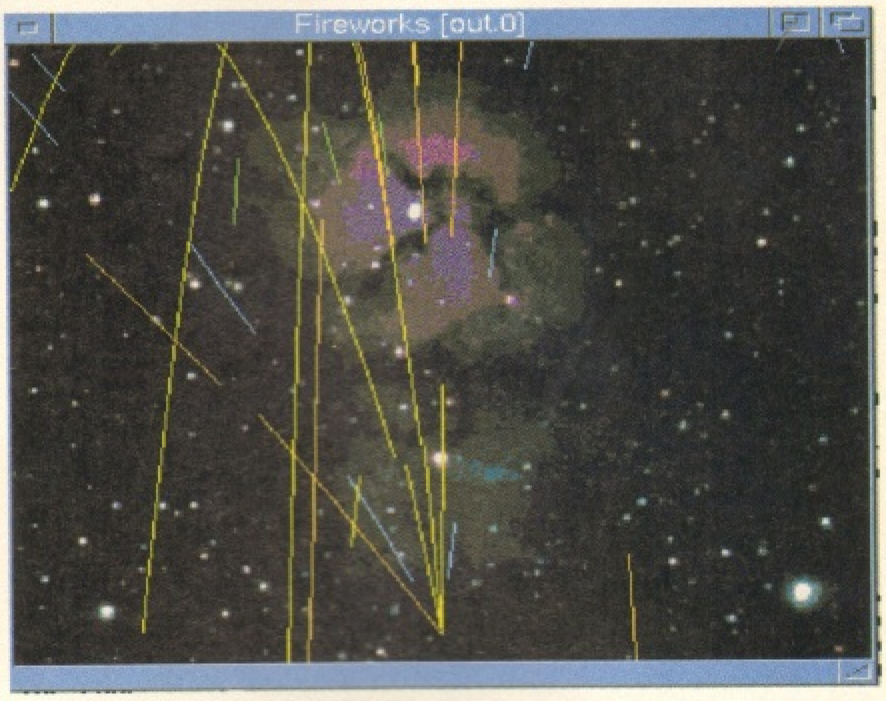
Once you have run CDPrefs, your setting will be saved to your hard drive and will be used every time you use this CD or any other CUCD.

Some people had problems with the original use of IDer, partly through a lack of understanding of how it worked and partly through a lack of explanation from us. All icons now use CUCDfile as their default tool, and the previous IDer problems should be a thing of the past. InitCD now copies CUCDfile and it's configuration to your hard drive, if it's not already there. This means that files copied from the CD will now work without needing the CD present. You will almost certainly need to run CUCDprefs to set it up to use your own viewers, but you should do that anyway as it will result in faster access. If you do have any problems, make sure you have run InitCD, at least once.

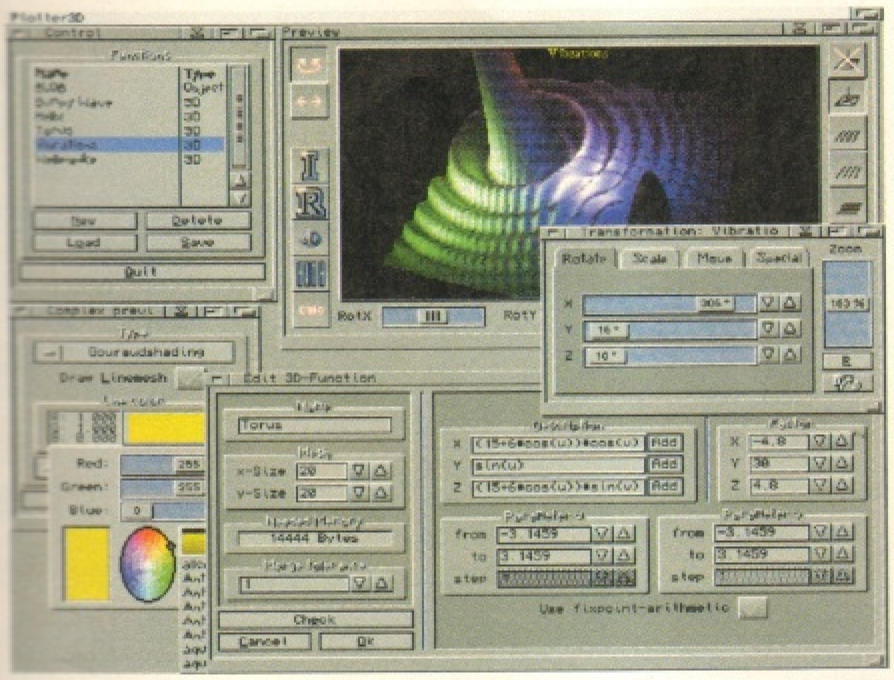
Highlights of CU Amiga Super CD 23



▲ With ADoomPC you can blast the bad guys faster than ever



▲ Watch the eye candy as PlayMF plays your MIDI songs



▲ Plotter3D creating stunning images from a few numbers

Games/ADoomPPC

ADoom, thought by many to be the best Doom clone, has now gone PowerPC. Until Quake is released for the PowerPC, this is probably your best chance of using the power of a PPC Amiga for gaming.

Demos/SPO98

Spoletium 98 was a demo party for Amigas only. Here are the top finishers in each category.

Graphics/Icons

NewIcons give Workbench the ability to display a wider range of icon colours, in the colours the creator intended. The AES icons collections of NewIcons have not been updated for a while, but here is a new set, using the extra colours that NewIcons4 offers.

Online/WebFX

WebFX is an add on for ImageFX. It is designed to create images and animations suitable for use on WWW pages. It uses a straightforward drag and drop interface to create effects for images and animations, such as drop shadows on pictures, or fading one to another as a gifanim.

Graphics/Plotter3D

Plotter3D creates graphics from mathematical functions, Imagine objects, pictures and fonts. It has interactive previews, so you can experiment with the settings and see the results immediately, rather than having to render again after each change.

Sound/PlayMF

PlayMF itself is a midi song player, that works well with an XG midi card as used in Project XG. It also comes with a couple of "utilities" to provide background eye candy while playing the songs.

Utilities/URB

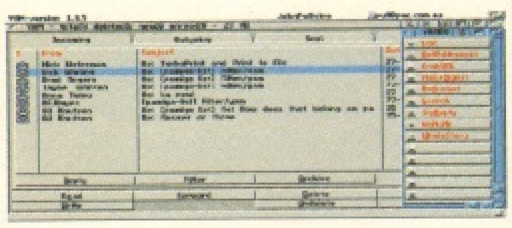
Ever wished your favourite program had just a couple of extra buttons for the things you do so often? URB lets you add button banks to any public screen and run Workbench programs, AmigaDOS commands or ARexx scripts from each button.

Online/WebTutor

This is a comprehensive tutorial on producing web pages. It's best viewed with AWeb since it makes quite extensive use of JavaScript, although it is viewable in other browsers too.

Kids

It's hard to pick out particular programs in here. There is a wide range of children's software, appropriate to all ages. Have a look and make your own mind up.



▲ Add command buttons to any screen with URB

Making things work

Wherever possible, we have tried to make software work straight from the CD, this isn't always possible for a number of reasons. Some programs need to be installed to your hard drive to work, often requiring specific system files. These files are usually on the CD so running InitCD often helps here.

Most software contains a list of system requirements in the documentation, and some will not run unless you have the required processor, memory operating system version or chipset.

Some programs, particularly demos and games are written in an OS illegal way. This can mean they only work on specific machine specifications, sometimes the readme states this, but not always. Many demos are intended to be run from a shell, the icons we add simply start them from a script. In some cases this will not work, especially demos that need a lot of Chip RAM. In this case you will need to boot without startup-sequence and run the program from the shell. Your Workbench manual should explain how to do this.

What's on this month's CU Amiga CD?



▲ **Learn to create or improve your web site with WebTutor**

CreatingGames:
Reality Game Engine, as supplied on the floppy disks is in here, along with a wealth of other material for creating your own games. There are several other games creators, such as Shoot Em Up Construction Kit, Backbone, Graal and updates on the main interactive fiction programs from last month's CD.

There is also a selection of tools and information for use with the established programming languages, and the complete source code to Alien Breed 3D, so you can see how a commercial game is programmed.

CDSupport:
This contains various support files, such as mod players, anim players, GMPlay, MUI, ClassAct. Most importantly, this is where the CDPrefs program lives. With this you can customise your CUCD to launch your choice of program for each type of file. Two other notable icons in here are Docs.guide, with links to all the program documentation files on the CD, and Index. Run Index, type in the name of a program, or part of it, and it will search the contents of the CD for you. You can either search the current CD or the index files of all CUCDs since number 4. CDSupport also contains icons to start ProNET in various configurations, ready to use when linking a CDTV or CD32 to another Amiga.

CUCD:
The CUCD drawer contains most of the CD contents, here is a selection of what each drawer holds.

CDROM:
The CDROM section has an updated collection of CDIDs for music CDs, with the addition of a number of heavy metal CDs to the collection. Information on the latest Aminet CDs has also been added.

Demos:
We have all the successful demos from the recent Spoletium 98 party, an Amiga-only event.

Games:
Another collection of games and data files, including a PowerPC version of ADoom and , along with a high quality replacement set of MIDI instruments for this and the 68K version. ADescent_VIRGE is the first game to utilise the 3D capabilities of the Cybervision graphics card.

Graphics:
Viewers to handle all kinds of graphic files, including a PDF viewer, and ademo of ArtStudioPro, as reviewed in last month's CU Amiga. There's also more collections of icons and backdrops to customise your Workbench.

Kids:
A comprehensive selection of the educational software available for the Amiga today. Paint packages, games, music and a lot more for younger Amiga users.

Magazine:
Here are all the support files for the C Tutorial. The software reviewed in the InternetPD pages is all on here, and some programs to use AIRLink. We have mpeg audio files of Petro Tyschtschenko's recent address in Finland, including a Q&A session.

Online:
Plenty of Internet software this month, including the latest Voyager, a new web server and WebFX for creating outstanding web page graphics. There is also a tutorial on creating web pages and the regular selection of postings to fidonet, usenet and the CU Amiga mailing list.

Programming:
As well as the programming tools in the main feature directory, we have several new and updated debugging tools here, some more MUI classes and the latest postings from the Amos, Blitz and E mailing lists.

Readers:
All your own work, another 20Mb+ of it. If you have created something you think is worth sharing with the rest of CU Amiga's readers, send it to us for inclusion here.

Sound:
A real treat for mod fans with around seventy modules on this month's CD. And if you are more interested in creating mods than listening to them, we also have a collection of quality 16 bit samples. MIDI fans aren't forgotten, with MidiTracker and a midi player that also works with ProjectXG.

Utilities:
A diverse collection of enhancements for your Amiga. If you want to add button bars to any screen, find files on your hard drive or improve your DOpus Workbench even further, there's something here for you.

WWW:
Another selection of Amiga related web sites. Naturally this includes the celebrated CU Amiga Online. If you have a web site you think should be on a CUCD, send us an email.



Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 810788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the water, Gloucestershire GL54 2HQ.

Please note that some CDs will not autoboot on systems other than CD32s, so try loading it from Workbench first. CUCDs will work with almost all Amiga configurations and filesystems. However, we recommend older CD filesystems be replaced where possible. A non-working program is *not* an indication of a faulty CD!

COVER DISKS

Reality Game Engine



Welcome to Reality - the Ultimate Software Construction Kit. Reality is a modular game creation system. With Reality, you can take stock or custom graphics, backgrounds, sounds and music and build a game around a framework (called a "skeleton" in Reality) to create your own masterpiece.

Loading instructions

To install the Reality Game Creator on your hard drive from this month's cover disk, first boot up Workbench and then insert cover disk 183. Open the disk and you will see an icon called 'Drag_Me_To_HD_and_Click'. If you do just this – drag it to the place on your hard drive where you wish it to go and double click it – Reality will be installed there. During the installation process you will be prompted to insert the other disk, cover disk number 184. The Reality system will create its own drawer.

Installation from the CD-ROM, is even easier. Just drag the RealityGameEngine to the location on your hard drive of your choice. While the system will run from the CD-ROM, you will be unable to save any changes there. To run Reality, open up the drawer named 'RealityGameEngine' and double click on the icon called 'StartREALITY'. Detailed instructions on using the system are contained these pages.

Getting Started

Reality is designed to be very usable on a stock A1200 system – a hard drive is not necessary, although is highly recommended for speed and storage purposes. Some Reality support modules may experience trouble with 060 Amigas, although the main Reality editors are generally friendly to various system configurations. Reality's modules do not multitask with each other, and most do not multitask with the rest of your system, either. You can exit Reality from the main menu (by clicking the title bar) or from certain Reality modules.

This will drop you back to Workbench and restore any other parts of your system which may have been running before you launched Reality. It's always safe to quit from the main menu since you save all of your work-in-progress in the respective modules.

The best add-on for Reality will be a good paint program, such as Personal Paint or Deluxe Paint. Reality comes with a rudimentary painter which should only be used by the extremely desperate. On one of our machines it crashed on exit – beware! To get your feet wet, we've included one Reality skeleton disk: Charlie Chimp. The authors have literally dozens of these to choose from if you find you want help branching out beyond the platform puzzler skeleton.

The skeleton disks are your key to making all your hard work in Reality pay off on the small screen.

Understanding Reality

Virtually all of the input (aside from text messages) you provide to Reality is with the mouse. Reality's GUI should be fairly comfortable for anyone with good Amiga experience, but some conventions may take some getting used to.

As mentioned before, Reality does not multitask, so screen-flipping and window-dragging are not



▲ The Reality Background Editor

enabled. Number input is perhaps the most unusual aspect of Reality's interface. Most programs handle numeric values with either a text gadget (type the number) or a slider (drag a bar to a certain value). Reality uses buttons. Left-click on a button to increase the value (usually shown in a bar elsewhere on the screen), right-click to decrease.

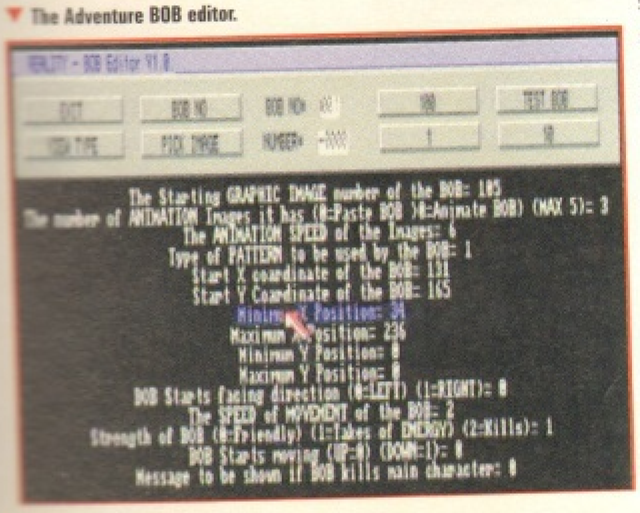
The Modules

Graphics Toolkit: This is the bread and butter of Reality. With this module, you prepare your sets of graphics tiles and game sprites, in Reality's custom .GRA format.

The Grabber utility imports IFF files that you've prepared in an external paint program. You should ensure that your images are all either 16 or 32 colours deep as those are the only two depths Reality wants to deal with, and is all you'll find in the skeleton software.

You can begin by loading up one of the included .GRA files to get the feel for how this module works. Hit the View Images button to scroll through a bank of graphics. This brings up a new set of controls to pan through: move to start, left, right, and end. You'll notice that all of the prepared .GRA files are tiled in the upper-left hand corner, which is how Reality optimizes graphics to save the most space. Since in the Grabber utility you may not get this precise, the Toolkit has a "scrunch" function to do it for you, either on a single picture or full bank of images. Important to remember is that tiles and sprites are treated in fundamentally different ways by Reality, despite being similar (but not identical) in their construction.

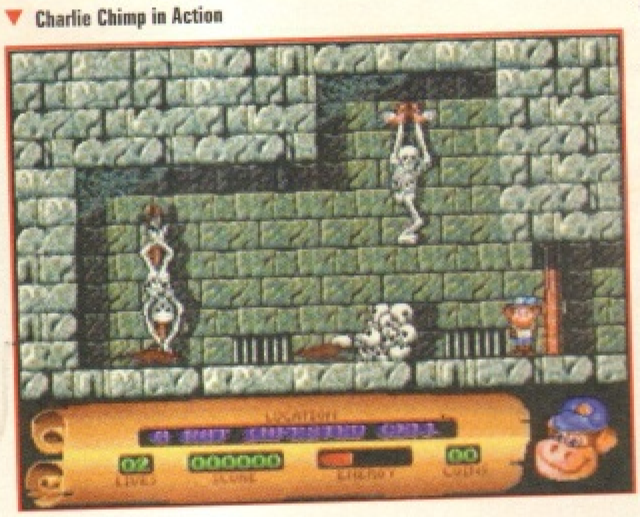
The "swap between" button allows you to switch the type of graphic you'll be working on. Similarly, when saving note the two different save buttons, for sprites and for tiles. Since they must end in .GRA you should include a textual clue as to what sort of file they are when saving: mypics_tiles.GRA versus mypics_sprites.GRA, for example.



▼ The Adventure BOB editor.

Animation Studio: Deliciously self-explanatory. The companion piece to the Graphics Toolkit. Here, you load in sprite .GRA data as created in the Toolkit, and see how it will look once you animate–a walking Charlie Chimp, in the example you'll find with this issue. The "hot spot" function allows you to create animations using frames which are not of uniform height, and a walking chimp qualifies, since he tends to bounce as he travels. By pulling up the Animation sub-menu, you can build an animation which runs on the screen while you work. Using "add image", you tell the system the sequence of frames you want to see flipped through. With the Chimp example, use Add Image to build the 6 frame animation of our hero walking to the side of the screen.

▼ Charlie Chimp in Action



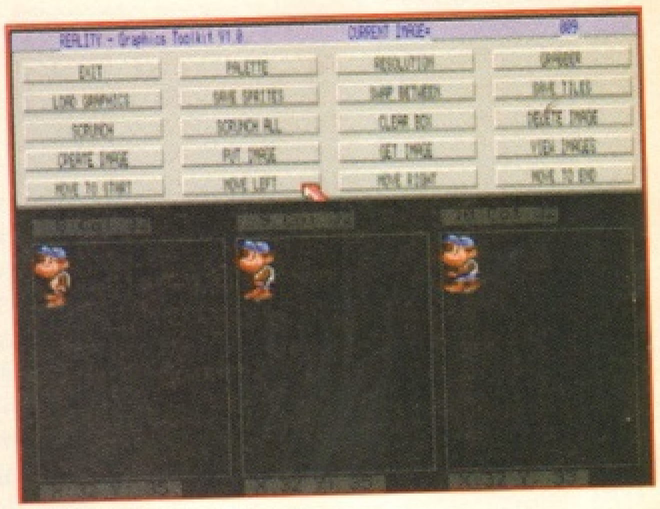
The speed button is one of those mouse button number inputs–the lower the number, the faster the animation. In this sub-menu, you check the progress of your graphical creation, as well as defining the hot spots to ensure the motion is smooth once you unleash the game on the world.

Sound Studio: Something of a misnomer, since you can't really create anything. Rather, this is where you preview sound samples (and set their speed) and music modules. These are both in custom formats as provided by Reality's creators. We've got four sample packs and thirteen tunes which should keep you busy. Checking the music is as simple as loading the tune in "load music" and hitting "music on." It will play until you hit the button again, or play a sound sample. Using the left/right mouse button trick on the Sample Number button picks which clip you want to hear, and the "Sam speed 1" and "100" alter the frequency by those units. The save functions are really provided so you can place copies of these files on other locations on your hard drive without having to leave Reality proper.

Picture Converter: This section of Reality lets you incorporate regular IFF files into your Reality games for use as title cards: intros, finales, that sort of thing. It really serves as a very basic image manipulator: you can save the image in a custom compressed ".PIC" format, alter the colour depth, and change the width and height in this module. Beware! This is not for scaling or any sort of intelligent colour interpolation. All you're doing is slicing the palette and reducing the visible area of the picture, respectively. If you need more complex work done you'll need to look to a program like ImageStudio or ImageFX. All this module will do is let you match depth to Reality's demands and let you tinker with the visible size of an image to give it the proper appearance.

Introduction Creator: You have to welcome your players to your game, and this is how you do it. This saves off intro data onto your skeleton disk. The main element is an IFF picture, which you load in with the Load Picture command.

Tack on a Reality music file, and, if you wish, add a text message with Edit Text. A few words about the interesting mouse/keyboard combination of the scroll editor: it's actually faster to use the mouse than the arrow keys to scroll through the text, but I strongly encourage you type your message. The "newline" or "#" breaks are used for some of the text display methods to indicate when they should drop down to a new line. The "text display" gives the Y-coordinate the text should start appearing on (some displays take up more space than others you may need to experiment with your image before you can settle on a display).



▲ The Graphics Toolkit

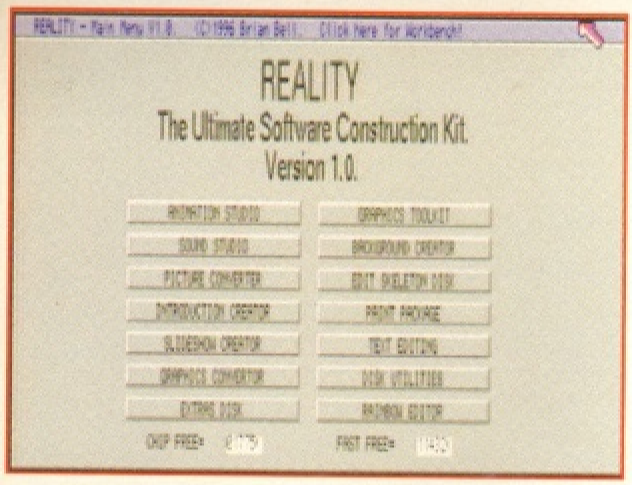
Slideshow Creator: Used to create an in-game slideshow – good for advancing the plot, rewarding the player for a job well done with some eye candy, that sort of thing. If you're far enough along with Reality that you're dealing with the Slideshow Creator it will be no problem for you, but a brief summary never hurts: You can prepare your slideshow with a tune at any time with the Load Music button. To set up the rest of the show, load each individual frame with the Load Picture button: IFF or PIC files. The screen will track how many slides are in your show in the "Picture No." indicator. Each picture can have its own Appear and Disappear effect, along with a delay time – the higher the number, the longer it's on the screen, with the exception of "0" which requires that the player hit the mouse or joystick

The Appear, Disappear, and Text Effect/Method buttons customize the intro with a series of special effects.

Appear Effects:
0: Fade Up 1: Up/Down Staggered slide 2: Left/Right Staggered slide 3: Full Up/Down slide 4: Left slide 5: Right slide 6: Interlace 7: Left/Right paint-on 8: Pour-on

Disappear Effects:
0: Fade Down 1: Break from Center 2: Swirl from Center 3: Swirl from Top-left 4: Left/right Swirl 5: (another) Swirl 6: Shrinking Box 7: Growing Box 8: (yet another) Swirl

Text Effects:
0: None (no text) 1: Plain scroll 2: Stretch scroll 3: Cylinder scroll 4: Stretch from center

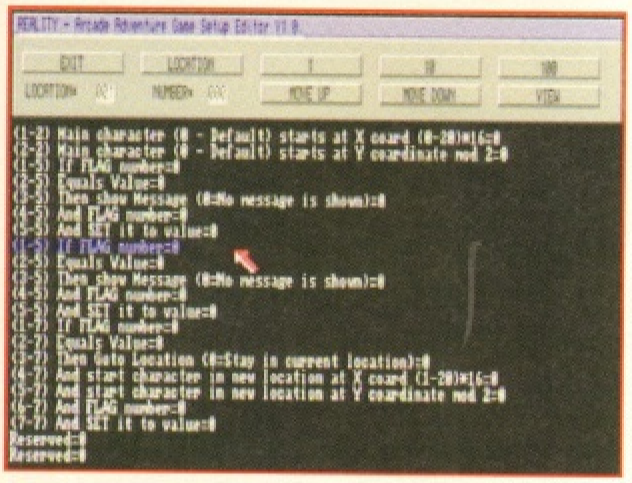


▲ The Reality main menu

button before the show will go on.

The Loop trigger determines whether the game will continue after the slideshow or simply start again (good for previewing and promoting your game). When you're done, "Save Details" will record the slideshow script for later use in the game building process.

Graphics Converter: Basically, a module to allow you to export pictures in the Reality .GRA format to an IFF file for treatment in an exter-



▲ The Adventure Game Setup Editor

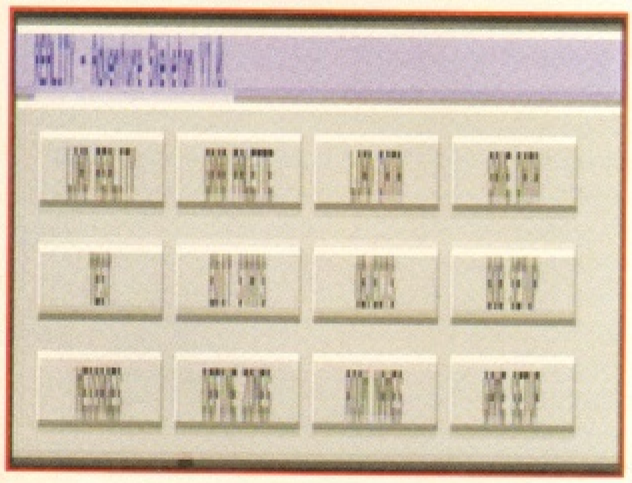
nal program. The only real trick here is that you should avoid using colour 1 for anything in the paint program as Reality reserves that colour for its own devices.

Background Creator (Map Editor): Once you get serious about game creation, you'll spend a lot of time in the Map Editor. This is where you create your playfield, using tiles to create a larger picture. Super Mario (or Giana Sisters, if you prefer) is the best example of a tile-based map game – you can visualize how the levels are built out of a relatively small number of repeated graphics.

Reality uses these tiles to create large maps which you can scroll across or use in frame-by-frame fashion (like a level) as your playground. The best way to learn this editor is by loading in an included set of tiles and the corresponding map. You can scroll across using the arrows on the upper right side of the control box.

To see clearly how the tiles work, turn on the grid under the Options submenu. The Map editor works very much like a paint program, except you paint with a large tile brush in a grid. You can scroll through your "palette" of tiles using the arrows near the double row of tiles. The right mouse button acts as a single level undo when drawing. Practice will make perfect and you'll be a master in no time. The one other major detail to note is the "Values" menu. This allows you to give an attribute to a particular type of tile, to mark it as a background, a platform, a door, a deadly surface, etc. The game creation phase actually defines what a value of 50 means as opposed to a value of 10, but it is in the map editor where you give the tiles their designation.

▼ The Adventure Skeleton main menu



Making your own Reality Edit Skeleton Disk:

Here is where all of the pieces of Reality come together. By using a Skeleton Disk, you can build your own game. The Charlie Chimp game is one of the skeletons provided and may be used as the basis for your own arcade adventure game, but the people at BPM make a number of different launchpad games if you want to play in another genre. Each Skeleton has different characteristics, so if you start branching out you'll have to learn some new techniques.

When you select Edit Skeleton Disk from the main Reality Menu it then asks you if you wish to access the Skeleton Disk from the hard drive. Click Yes here. It than prompts you to select a Skeleton Disk. Choose number two for the arcade adventure skeleton and click OK.

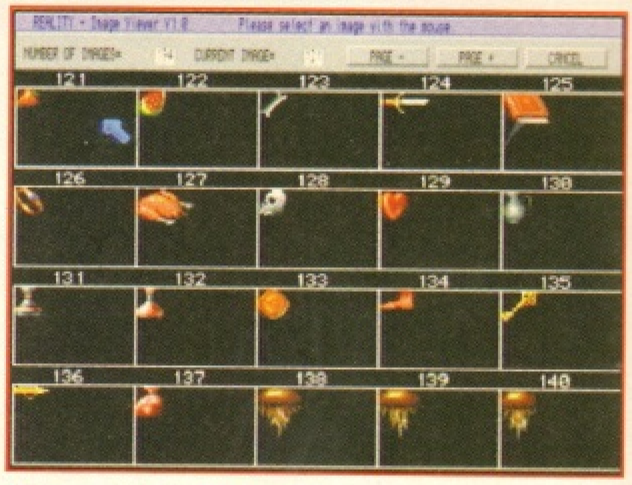
The Adventure Skeleton

You are presented with the following option

Load Reality: Returns to the Reality main menu.

Test: For play-testing your game. This is a good way to play through Charlie Chimp to get a feel for what the game looks like before you start dissecting it, as well as a way to get reasonably quick verification that your changes work (or don't). Note that you don't see any intro you may have created, only the game itself.

Edit Stats: Here you set the global characteristic for the game, such as the number of lives for the player, the players animation sequences, and the positions of text messages on the screen. The interface is quite odd, and there's no cancel button , so be very careful before you start messing with it. Here's how to make changes. Look at, but don't click on, the list on the screen. There are various game attributes, followed by their numerical settings. Use the number increment buttons with your left and right mouse buttons to set the number that you want to change one of those atttributes to. This is a little uncomfortable but if you're careful you will get the hang of the system.



▲ Choose an object for your adventure

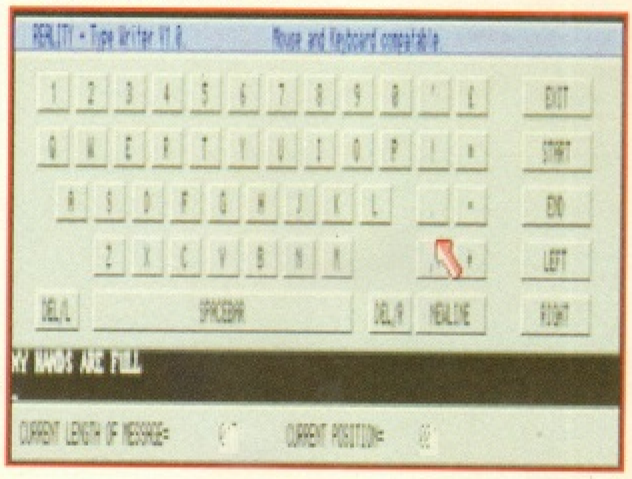
Messages: You'll want to communicate with your players, and this is where that takes place. Messages are identified by number and the Message Editor lets you choose which message you want to Edit or View. The Edit Message function is very straightforward with the same on-screen keyboard used in the main Reality program. View message allows you to display the message as it will be seen in the final game. Exit takes you back to the main Adventure menu.

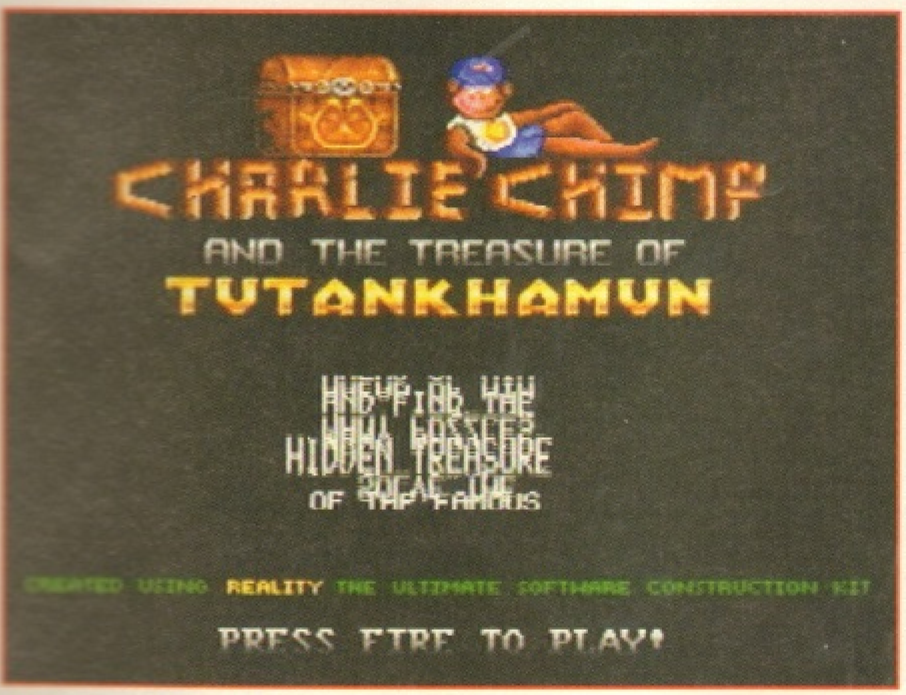


▲ Charlie Chimp picking up an object

Objects: Hammers, daggers, potions, powerups. They're all objects, and they need your help before they can be real. The Object

▼ The Adventure Message Editor





▲ The Charlie Chimp intro screen

Editor is where you create them. You set an object's characteristics - what it does to the player, his score, his money, as well as what the object looks like and where it may be found in the game. Take a look through the objects in Charlie Chimp and note how they mete out reward and punishment.

The Obect Editor allows you to define up to 100 objects. You may select the number of the object you wish to modify in the usual fashion. The number on the screen below the object number may be applied to the list of object attributes shown by clicking. The number may be altered first by clicking on the 1 or 100 gadget in the usual way.

You may assign each object an image by selecting a number and applying it to the graphics image attribute or, alternatively, by selecting the Pick Image gadget. This allows you to view your previously defined graphics and select and object's image visually.

The Edit Name gadget is for giving each of your object's a textual name and works similarly to the Message Editor above. An object may be located in the game, either by applying numbers to the location and coordinate attributes or by selecting the View+Set gadget. This displays the graphics of a particular room and you can position an object within the room with the mouse.

Room Names: fairly minimal module, used to create room descriptions for in game use. Scroll through the room numbers with the button, enter the name and you're done.

Define Zones: Zones are places where special things happen in the rooms of your game. They are used to track the position of the player and, in conjunction with Game Setup options, allow the creation of the puzzles. For example, to create a locked door in your game, you could define a zone the size of the door and by use of the Game SetUp options, not permit the player to enter that zone unless the key is dropped in an adjacent zone.

Before you actually create a zone, you must select the room in which the zone is to be located and the zone number you wish to define. There may be four zones for each room. You define a zone by left-clicking on the upper left hand corner of the area you want to define and right-clicking on the lower right hand corner. (Beware! A zone must be at least one pixel thick – don't left-click on the very bottom of the screen or you'll be sorry.)

BOB Setup: BOBs are special objects or characters in your game. A typical use for BOBs is for creating enemies which attack your player, but other uses include animated and static backdrops. BOBs are not restricted to location grids like normal objects are and may have simple movement sequences & animation.

The BOB editor works much like the objects editor. You make pick a BOB number, apply a number to a particular BOB attribute and select the BOB's graphic image in a similar way. The View Type gadget may be selected after choosing a number and lets you view an example of each type of BOB.

For example, type 0 is a static animated BOB, while a type 1 BOB moves horizontally and is animated. The Test Bob gadget allows you to pick a room in your game and view the graphics and animations of all the BOBs, etc.

Game Setup: This is where it all comes together for your game. It allows you to design and specify how all puzzles, objects, zones and other features interact with your player. When you click on the Game Setup gadget you are presented with a list of attributes for a particular location.

This list may be scrolled up and down using the move up and move down buttons. These attributes effect a set of conditions and tests for that location. The first 55 attributes are used when the player first enters a location - for example, the first two specify the start location for the player in that location. The Next 10 allow you to specify which Zones the player can enter and which he cannot. The next 105 are used for when the fire button is pressed while the player is standing in Zone 1, the following 105 for when the button is pressed in Zone 2, etc.

One concept that you will need to get to grips with is Flags. Flags are used similar to the way variables are used in usual programming languages. There are 256 flags, each of which may have a value between 0 and 255. Before any process is carried out in the game that requires certain conditions to be met, the computer will check the value of certain Flags to see if they are set to a particular value. For example, the sequence

IF FLAG number=5 Equals Value=0 Then SHOW message=19 And FLAG number=5 And SET it to value=60

will check to see if FLAG number 5 is equal to 0 and, if it is, message number 19 will be displayed. Then it will set the FLAG number 5 to the value 60. (There are a few special Flags. Flag 0 is reserved and Flag 1, when set to 255, tells the system that the game has been completed.)

The best way to learn how this system works is to experiment with the game supplied. Try changing certain flags, etc. to see what results you get.

Conclusion

Reality is willing to do much of the grunt work in game creation. You don't need to be a skilled programmer, and the included music, sound effects, and graphics mean you don't have to be an artist, either.

All you need is a little creativity and hard work, and you and Reality will be turning out the kind of games you want to play! ■

Richard Drummond/Jason Compton

Graphics & Video



The Eyetech 1-slot Zorro adapter, CV64/3D graphics card and the AUTO-MON CV64 3D & Amiga RGB video switch.

Eyetech 1-slot Zorro adapter	£99.95
Eyetech 7-slot Zorro adapter	£149.95
1-slot to 7-slot Zorro upgrade	£79.95
CV 64/3D 4MB graphics card	£159.95
1-slot Zorro + CV64/3D bundle	£249.95
AUTO-MON video switch	£39.95

The MK2 EZ-VGA scan doubler adapter is now available with optional flicker-fixer for rock-steady 'interlaced' PAL/NTSC display modes

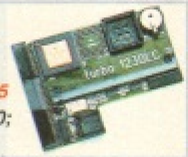
EZ-VGA non-upgradeable s/doubler 23F-23M	£69.9[illegible]
EZ-VGA Mk2 upgradeable s/doubler 23F-15F	£79.9[illegible]
EZ-VGAPlus s/doubler/flickerfixer 23F-15F	£119.9[illegible]
Engineering-workstation quality 17" monitor, 0.26 dot pitch, 1600 x 1280 @75Hz non-interlaced, 1yr on-site + 2yrs RTB warranty	£399.9[illegible]

Eyetech EZ-TOWER Options

	Backplate Kit	DIY EZ-Tower	Full EZ-Tower	EZ-Tower Plus
DF0: face plate, cable	*Yes*	*Yes*	*Yes*	*Yes*
Custom backpanel w/SCSI,audio KO's	*Yes*	*Yes*	*Yes*	*Yes*
A1200 power and LED adapters	*Yes*	*Yes*	*Yes*	*Yes*
CE-approved metal PC case	*n/a*	*Yes*	*Yes*	*Yes*
No of bays/PSU capacity	*n/a*	*10/250W*	*10/250W*	*10/250W*
Accessible PCMCIA slot	*Yes*	*Yes*	*Yes*	*Yes*
DIY assembly instructions	*Yes*	*Yes*	*n/a*	*n/a*
Installation instructions	*Yes*	*Yes*	*Yes*	*Yes*
PC board/Siamese compatibility	*Yes*	*Yes*	*Yes*	*Yes*
Assembled & A1200-ready	*No*	*No*	*Yes*	*Yes*
EZ-Key adapter & Win95 k/b*	*Option*	*Option*	*Option*	*Yes*
Eyetech installation option	*No*	*No*	*Yes*	*Yes*
Cost with options as specified	*£39.95*	*£79.95*	*£99.95*	*£148.95*

* The Eyetech *EZ-Key* adapter autodetects Amiga & PC keyboards & has two selectable PC keyboard mappings.

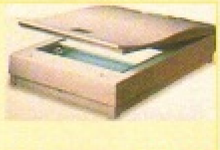
Stop Press!!! Special Purchase of Apollo '030EC/33Mhz A1200 accelerators (max 8MB) from £49.95 - whilst stocks last!



Apollo Turbo 1230LC '030EC/33MHz -Just £49.95

Options: 33Mhz FPU +£10; 4MB +£10; 8MB +£20; MMU (non-EC) version +£10

Special Purchase of SCSI flatbed scanners from £129.95 - whilst stocks last!



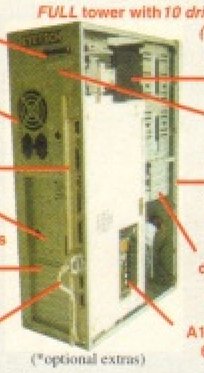
- √ 600dpi, single-pass, 24-bit A4 flatbed scanners
- √ Amiga model comes with ScanQuix3 software, and PC and Mac software. Not *Surf-Squirrel* compatible.
- √ EZPC model comes with PC SCSI ISA interface and cable, PC and Mac software. (No Amiga software)

Amiga Scanner/ScanQuix3 - £179.95 ***EZPC Scanner - £129.95***

Do you belong to an computer club which is self-sufficient in technical help?

Then why not apply for an Eyetech Amiga Club Trade account which entitles you and your club members to the very best levels of discount and exclusive club offers on Eyetech's Amiga products.

"This definitely one of the easiest solutions to building your own tower." Amiga Format
"The Eyetech tower offers clever solutions with a Velcro easyfit mentality" Cu Amiga



(*optional extras)

Now You've Got Tower Power!

Apollo Accelerators

A600 33 MHz '030 MMU & FPU to 32MB (7 Mips)	- Just £69.95
A1200 25MHz '030 with MMU & FPU. (5 Mips)	- Just £68.95
A1200 33MHz '030 with MMU & FPU. (7 Mips)	- Just £79.95
A1200 25MHz '040 with MMU & FPU. (19 Mips)	- Only £128.95
A1200 33MHz '040 with MMU & FPU. (25 Mips)	- Only £158.95
A1200 40MHz '040 with MMU & FPU. (30 Mips)	- Only £188.95
A1200 50MHz '060 with MMU & FPU. (39 Mips)	- Only £268.95
A1200 66MHz '060 with MMU & FPU. (51 Mips)	- Only £318.95

phase5 PowerUp PPC + '040/'060 Accelerators

Without SCSI (not upgradeable)

A1200 160 MHz PPC with '040/25/MMU/FPU.	- Only £238.95
A1200 160 MHz PPC with '060/50/MMU/FPU.	- Only £438.95
A1200 250 MHz PPC with '040/25/MMU/FPU.	- Only £348.95
A1200 250 MHz PPC with '060/50/MMU/FPU.	- Only £568.95

***With factory-fitted onboard Fast-SCSI II interface* - add just £50 to the above prices**

4MB - £13.75; 8MB - £24.95; 16MB - £34.95; 32MB - £69.95

Limited offer - 20% off these memory prices when purchased with an Apollo or phase5 PowerUp PPC accelerator!

A1200 *TowerDrives*

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVER 4.3GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). They appear to work but overwrite the RDB after 4.3GB into the drive. Be warned!

- √ All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.
- √ All drives over 100MB come with over 45 top quality utilities (not shovelware) *and* MMe multimedia authoring software preinstalled, configured and ready-to-run.

TowerDrives:

		1.2GB	£109.95
1.7GB	£119.95	2.11GB	£139.95
3.2GB	£164.95	4.3GB *(max!)*	£199.95

2.5" InstantDrives for the A600/A1200/SX32

20MB	An entry-level drive for the SX32/A600.	£34.95
170MB	An entry-level drive for the SX32Pro/A1200	£69.95
720MB	A drive for serious A1200/SX32 Pro users	£129.95
1.4GB	A high performance drive for power users	£169.95
1.8GB	Top-class drive for the A1200/SX32Pro	£189.95

See price list for bare CDROM units & unformatted drives

New! EZ-CDR CDWriter from Eyetech.

- √ 8x read, 2x write drive - fits in any standard 5.25" bay.
- √ Full MakeCD software *personal edition*, manuals & cables
- √ Back up 650MB for around £2.00 *(Buffered i/f & EZ-IDE needed)*

EZ-CDR Amiga CDWriter/software - Just £289.95

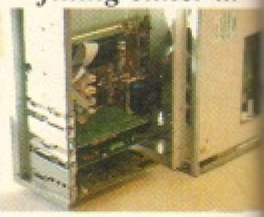


The A1200 EZ-Tower

All EZ-Towers ...



...feature a slide-out mounting frame fo[r] fitting either ...



...a standard PC motherboard and cards, or...



...a Zorro board an[d] cards (as well as your A1200).

Looking for an all-in-one package? Why not treat yourself to the Eyetech EZ-Tower Professional Pack 2?

Just look what you get for an unbelievable £799.95!

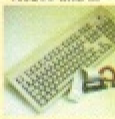


The Eyetech Professional pack comes with a full EZ-Tower, new WB3.1 A1200 and ...

- √ ***EZ-Tower*** with full UK specification A1200, ***Kickstart 3.1/Workbench 3.1*** disks and manuals, mouse, mousemat, TV lead and 250watt psu.
- √ ***EZ-Key*** keyboard adapter, ***Windows95 keyboard.***
- √ ***33MHz '040*** processor (approx 25 Mips) with MMU & FPU and ***32MB*** of program memory.
- √ ***3.2GB TowerDrive*** with Workbench 3.1 and Magic Pack software preinstalled
- √ ***20-speed CDROM*** including the ***Eyetech EZCD-Mk4 4-device buffered interface*** with ***fully registered EZ-IDE*** CDROM/hard drive/IDE Zip drive/LS120 driver software
- √ ***880KB floppy drive*** including faceplate
- √ Fantastic software bundle including ***Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz***
- √ All items fully installed, tested and ready-to-go!

AND the option to have:

- √ An ***LS120*** 720KB/1.44MB/120MB super floppy drive/cable installed in your machine for ***just £84.95 extra*** (at time of purchase only)



EZ-KEY & Win95 k/b,



33MHz '040 & 16MB fast RAM,

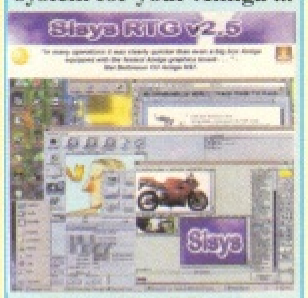


16x CDROM, 2.1GB HD, EZ-IDE s/w & 4-way EIDE i/f.



The optional LS120 120MB Superfloppy

The fantastic Siamese RTG2.5 ethernet graphics system for your Amiga ...



... Just add a PC motherboard and it becomes the perfect partner for your EZ-Tower'd A1200!

Then use PC-side hard & floppy drives, CDROMS, printers and graphics cards as native Amiga peripherals!

The Eyetech Ethernet Siamese pack contains:

- √ A1200 PCMCIA ethernet card and driver software
- √ PC ethernet card and driver s/w
- √ Ethernet cable, 'T' pieces and terminators
- √ Full Siamese RTG2.5 software

All this for just £199.95!!!

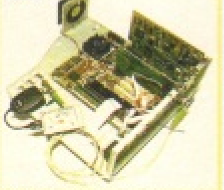
(Amiga TCP/IP stack & Win95 O/S required)

Love your A1200 but need PC compatibility for work or study purposes? Then you need Eyetechs EZPC-Tower system!

Just £999.95 gets you a fully loaded Siamese ethernet system with:



- √ A full Amiga ***EZ-Tower*** system ***ready to take your A1200.***
- √ Jumperless 266MHz-capable PC Pentium board, ***200Mhz MMX cpu, 64MB*** memory, ***Win95 keyboard***, ***mouse*** & second fan.
- √ ***Full-screen full motion full colour video capture*** card with ***TV tuner and frame grabber*** (with video camera input).
- √ High performance, ***high res graphics card*** with full screen/full frame rate ***MPEG playback.***
- √ ***32-voice*** high performance ***sound card*** with direct-to-disk, ***CD-quality recording software.***
- √ ***3.2GB*** hard drive, ***32x speed*** CDROM, ***2x S,1xP & USB ports*** and 1.44MB FDD
- √ Full ***ethernet Siamese 2.5RTG*** system with ***Amiga and PC ethernet cards***, driver software, cables & terminators and ***scandoubling system for non-retargetable Amiga screens*** such as games. (The ethernet Siamese system requires an Amiga TCP/IP stack - as used by Internet software - and Windows95 operating system - see below).



EZPC & Amiga ethernet adapter



HD,CDROM,FDD & optional CDROM Writer upgrade

EZPC options (at time of ordering only) :

√ CDROM upgrade to CDROM 2x writer, 8x reader	+£249.95
√ Windows 95R2 OS & Lotus Smartsuite bundle (WordPro, Lotus 123, Approach Database, Organiser, Freelance Graphics etc)	+£99.95
√ Miami Siamese TCP/IP stack for Amiga (fully registered)	+£19.95

Ring for hard drive, CDROM, memory & processor upgrade options

The Eyetech Amiga Parts and Price Index June 1998 issues

Interfaces and adapters

ADPT-AUD-EZTW	EZTwr audio mix/adapter for A1200/CDROM	19.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mix/adapter	19.95
ADPT-AUD-RCA	RCA(phono)-M -> 2xRCA-F adapter	2.50
ADPT-AUD-RCA-G	RCA(phono)-M ->2xRCA-F gold plated adapt	3.50
ADPT-CDPL-PWR	CDPlus external power socket + HD pwrcab	9.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	6.95
ADPT-DF0-TWR	34-34 way cable and faceplate for DF0	12.95
ADPT-ETH-BNCT	BNC T-piece 2xM + 1xF	4.95
ADPT-ETH-TERM	Ethernet BNC coax terminator 50R	4.95
ADPT-EZKY	Amiga/PC k/b -> A1200 kbd ribbon cable	39.95
ADPT-EZKY-A4K	A1200 EZKey/6p->5p adptr/A4000 kbd bundle	79.95
ADPT-EZKY-W95	Amiga/PC k/b->A1200 rib cab+Win95 kbd	49.95
ADPT-HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brkt/pl ->5" bay	5.95
ADPT-KBD-5P6P	Amiga/PC k/b adapter 5p din-F ->6p m/d-M	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p mindin-F ->5pd-M	5.95
ADPT-PCM-ETH	PCMCIA ethernet card with Amiga/PC drvrs	89.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95
ADPT-SQ3-PAR	SQ3 adapter Epson scanner->par prt cable	9.95
ADPT-SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
ADPT-SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
ADPT-SW-S/K	Dual monitor & k/b switchbox	19.95
ADPT-VGA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-15M9F	Adapter from 15p HD-M VGA to 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95
ADPT-VGA-BUF	Amiga 23pin-F to 15pinHD-F VGA adapter	19.95
ADPT-VGA-SD23	External Amiga s/doubler 23F-23M for AutoMon	69.95
ADPT-VGA-SDBL2	External Amiga s/doubler 23F-15F upgradable	79.95
ADPT-VGA-SDFF	External Amiga s/doubler with f/fixer 23F-15F	119.95
ADPT-VGA-SDUG	SDBL2 to SD-flickerfixer u/g	50.00
ADPT-VGA-UNBF	Amiga 23 pin(f)-15 pin HD(f) VGA adapter	12.95
INT-12C-DSKPL	DiskPlus FDD D/H/S dens i/f A1200clkport	69.95
INT-12I-EZCD4	Mk4 4-dev buf IDE i/f w/AIPU w/A1200 CD s/w	39.95
INT-12I-EZCDSE	Economy 4-dev buf IDE i/f w/A1200 CD s/w	24.95
INT-12I-EZCD4/C	Mk4 4-dev buf IDE i/f w/3x40,2x44 13cm cabs	49.95
INT-12I-EZCD4/C/E	Mk4 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	59.95
INT-4KI-CD4	4-device EIDE interface for A4000	19.95
INT-FDD-DF0	Interface for std Sony FDD for DF0 880KB	14.95
INT-SER-PPL	PortPlus 2x 460kb ser + hispeed par port	79.95
INT-SER-PTJR	PortJunior - 460KB serial i/f for A1200	39.95

Zorro 2/3 boards and adapters

ADPT-Z2-A12/1	A1200 ZII adapter with 1 ZII slot	99.95
ADPT-Z2-A12/1/K	A1200 ZII slot with PC/A2000 k/b interfc	134.95
ADPT-Z2-A12/7	A1200 ZII adapter w/ 7xZII + 5xISA slots	149.95
ADPT-Z2-A12/7/UG	A1200 ZII adapter 1->7 slot u/g (p/x)	79.95
ADPT-Z2-KBUG	Keyboard interface upgrade for Z2 adpter	35.00
GFX-C643D	Cybervision 64/3D Z2/3 Amiga graphix crd	159.95
GFX-Z2-CV/Z2-1	1-slot Z2 +C643D bundle without f/fixer	249.95
GG2-Z2-BB	GG2 Zorro2 brigeboard for PC ISA periphs	119.95
GG2-ISA-ETH	NE2000 ISA ethernet card BNC for GG2-BB	19.95
GG2-ISA-MIO	Multi-I/O ISA card 2xIDE,2xSER,1xP	14.95
INT-Z2-IDEPL	IDEPlus 6xIDE+2x DD/HD Am/PC FDD Zorro2	69.95
INT-Z2-PPL3	PortPlus Zorro 2xS, 1xP, expansion bus	69.95
INT-Z2-PPL4	PortPlus4 - Zorro 4xSerial + expansn bus	89.95
INT-Z2-PPX	2xS +1xP expansion for INT-Z2-PPL3/4	59.95

Cables

CAB-AUD-CD	CDROM inv'd T audio cab .6m + 2xRCA plg	9.95
CAB-AUD-MIX	RCA(phono)-M -> RCA-M+RCA-F mix ld 1.8m	6.95
CAB-AUD-MJ/PH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
CAB-BT-EX10	10m BT extn cable + 2 way phone adapter	9.95
CAB-BT-MOD	FCC68/4/6 to BT4 modem phone lead 1m	5.95
CAB-ETH-60C	Ethernet coax/BNC-F 60cm for Siamese	9.95
CAB-FDD-EX2M	External FDD extn cab 23-M -> 23-F 2m	14.95
CAB-FDD-EX50C	External FDD extn cab 23-M -> 23-F 0.5m	12.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD pwr 0.9m	9.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 0.9m	9.95
CAB-IEC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F	19.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
CAB-KBD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	[illegible]
CAB-PD-30C	44->40way 3.5" HD data & pwr cabs -A1200	[illegible]
CAB-SCS-25/50	SCSI cable DB25-M -> Cent50-M 1m	[illegible]
CAB-SCS-25M/25M	SCSI cable DB25M-DB25M mac type	[illegible]
CAB-SCS-50M/50M	SCSI cable Centr50M->Centr50M 1m	[illegible]
CAB-SER-EX2M	DB25-M -> DB25-F RS232 extn cab 2m	[illegible]
CAB-SER-EX50C	DB25-M -> DB25-F RS232 extn cab 0.5m	[illegible]
CAB-SER-SSQ	9pDM->9pDF SurfSq EZTwr ser extn cab 50cm	[illegible]
CAB-UPT-X60C	Crossed twisted pair/RJ45 for Sisys 60cm	[illegible]
CAB-VGA-10H15M	10p IDC-F header->VGA 15pHD-M for CV64-3D	[illegible]
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	[illegible]
CAB-VGA-MM	15p DM-HD -15p DM-HD VGA cable 2m	[illegible]
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	[illegible]
CAB34-2W-50C	34way-F x2 FDD ribbon cable for tower	[illegible]
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	[illegible]
CAB40-3W-1M	40Way IDE/HD/CD cable 3 contr 1m o/a len	[illegible]
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	[illegible]
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	[illegible]
CAB40-DDC	IDE IDC40-F -> IDC40-M with mtgs 15cm	[illegible]
CAB44-2W-13C	44way (2.5" HD) cable 2 cntr, 13cm o/a	[illegible]
CAB44-2W-60C	44way (2.5" HD) cable 2cntr, 60cm o/a	[illegible]
CAB44-2W-9C	44way (2.5" HD) cable 2 cntr, 9cm o/a	[illegible]
CAB44-3W-12C	44way (2.5" HD) cable 3 cntr, 12cm o/a	[illegible]
CAB44-3W-24C	44way (2.5" HD) 7+17cm,3 cntr,24cm o/a	[illegible]
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	[illegible]
CAB44-CD-9C	44way (2.5" HD) cable pur with CD/HD 9cm	[illegible]

Eyetech's WoA'98 specials A1200 PowerPC boards w/040/25/MMU/FPU - £238.95! Siamese RTG2.5 ernet packs £199.95; Amiga DigiCam s/w - £39.95; DIY EZ-Towers from £79.95!; 20xCDROM system - £99.95!!!; ; 030 /33 accel's from £49.95, w/4MB - £59.95; 19 Mips '040/25 £128.95; 39 Mips '060/50MHz 68.95; 20% off mem prices bought with accel.; LS120 /Zip £89.95; EZ-Twr/EZKey/Win95 kbd - £148.95

(New) AMIGA HEALTH WARNING

"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices"- John Kennedy - AF - 7/97

t be tempted to skimp. Preserve your Amigas health with IDE technology from Eyetech - *THE* IDE specialists. The Eyetech *EZCD-Mk4 fully buffered 4-device interface with active IRQ pull-up* (AIPU) for performance A1200 systems is now available.
less-exacting systems our economy interface - the *EZCD-SE* - is available for *just £24.95 including CDROM driver software* - see below. Its a small price to pay to preserve your Amigas health.

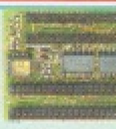


Amiga 1200 Magic Packs

- Direct to Eyetech from Amiga International Inc.

- Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals, UK psu, mouse, mousemat and TV lead and 2MB graphics memory (in addition to any memory expansion included in the packs below).
- Fantastic software bundle including Wordworth 4SE,Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz
- Hard drive versions come with Scala MM300 preinstalled
- Other options available - please ring. EZ-Tower options also available from £349.95

The new EZCD-SE economy 4-device buffered interface from Eyetech -Just £24.95

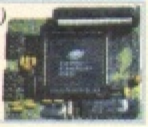


Suitable for most medium performance A1200 systems.
Comes with fully functional (non-shareware) CDROM s/w
Upgrade to full EZ-IDE software (if required) at £14.95 at time of purchase or £17.50 later.
Trade up to EZCD-Mk4 i/f at full buying price (less carriage) within 30 days

Special World-of-Amiga '98 EZCD-Mk4 bundles - by post!

EZCD-Mk4 alone - just	£39.95
EZCD-Mk4 with 3x40 way and 13cm 44-way cables	£49.95
EZCD-Mk4 with full EZ-IDE s/w and 40- & 44-way cables	£59.95

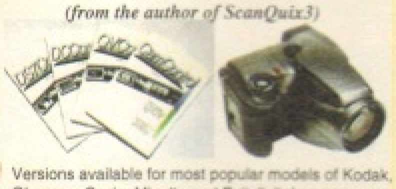
PortPlus & PortJnr high-speed serial (460Kbd) and parallel (800KB/sec) ports for the A1200



PortPlus	- 2x serial & 1 x parallel -	£79.95
PortJnr	- 1x serial port -	£39.95
PortPlusZ2	- 2xS+1xP (Zorro 2 bus) -	£69.95

Amiga Digital Camera Software

(from the author of ScanQuix3)



- Versions available for most popular models of Kodak, Olympus, Casio, Minolta and Fuji digital cameras.
- Picture transfer, camera control & slideshow options.
- Selectable serial device support for data transfer.
- Integrates directly with PPaint, DPaint, Pagestream, AdPro, Photogenics & with other programs via Arexx

CamControl software only	*£39.95*
CamControl & PortJnr i/f	*£69.95*

Eyetech Starter Pack

Diskette based system as above
Add an '030/33/MMU/FPU with 8MB for just £79.95 and/or a170MB HD for just £60.00
Just £189.95

Productivity Pack 2

170 MB hard drive system with software preinstalled 030/33/MMU/FPU with 8MB
Just - £329.95

MiniTower CD Pack

1.7GB hard drive - 20-speed CDROM - '040/25 accelerator & 16MB - EZCD4 buffered i/f - EZ-IDE s/w - MiniTower with 230W psu - cables
Just - £599.95

Professional Pack 2

Full Eyetech EZ-Tower - EZ-Key i/f - Win95 k/b - 2.1GB HD - 20x CDROM - '040/33 accel & 32MB - EZCD4 buffered i/f - EZ-IDE s/w - cables
Just - £799.95

The *Top-Rated* Eyetech CDPlus Range for the A1200

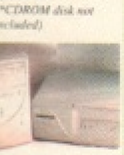
AUI	- 97%	*"... It all worked faultlessly..."*
AF	- 96%	*"... An absolutely superb bit of kit.."*
AS	- 90%	*"... This is a quality product..."*

New! 20-speed CDPlus Systems from just £99.95!!!

	CDPlus SE	CDPlus MT/DT	CDPlus Gold
Standard sized mechanism	Yes	Yes	Yes
Dimensions (cm)	23x15x5	42x35x18	27x24x6
Licenced software included	CDROM	CDROM	Full EZIDE
4-device interface	EZCD-SE	EZCD-SE	EZCD-Mk4
Audio out 3.5mm jack	Yes	Yes	Yes
Gold phono audio jacks	Option	No	Yes
PSU type/rating	20W ext'l	230W int'l	40W int'l
PSU capability	1 x CDROM	4 x CD/HD + A1200	1 x CDROM + 1 x HD
Bays for extra HD/FD/CD's	Yes	5 in total	Option (1)
Upgrade option to 32-speed	+£20.00	+£20.00	+£20.00
Upgrade option to CDWriter & s/w	n/a	+£269.95	+£269.95
Cost with 20-speed mechanism	£99.95	£119.95	£149.95



*The 20-speed CDPlus-SE system**
(*CDROM disk not included)



The CDPlus MiniTower & Desktop systems



The CDPlus Gold system
(Shown with optional Zip drive case)



*The optional 2x write/8x read CD recorder upgrade **
(*CDROM disk not included)

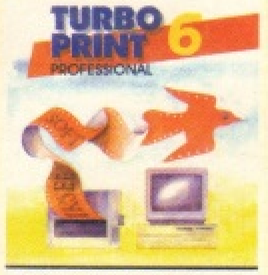
EZ-IDE

Only available from Eyetech. Probably the only hard drive/CDROM/LS120/ZIP/SyQuest s/w you'll ever need.

- Supports LS120, Zip, Jaz, SyQuest and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Includes Eyetech's IDE ZipPrep Tools.
- Optimises IDE hard drive performance automatically. Eliminates 'MaxTransfer' nightmares.
- Extensive CDROM support including multidisk changers, direct digital audio transfer, CD32 emulation, high performance filesystem support for Amiga, Mac and PC CDs.
- Ready-to-use as shipped. No sending away to foriegn parts for registration codes as with the 'commercial' versions of IDE-fix97 and Atapi Pn'P.

EZ-IDE s/w	£34.95
w/ EZCD i/f	£17.50
w/ Zip, LS120	£17.50
IDE-fix u/grd*	£14.95

*Trade-in & proof of purchase required



IrseeSoft V6.02 AMIGA Computer

- **The most comprehensive, fastest printing system for all WB2.x+ Amigas**
- **Supports the latest printers from Epson, Canon, HP**
- **Integrates seemlessly with ScanQuix3 scanning s/ware**

TurboPrint 6 £38.95

The *ATAPI* Zip & LS120 100+MB cartridge drives from *Eyetech*

Just £89.95
(either drive type)



The IDE Zip drive fitted in an A1200. The LS120 is the same physical size.

100MB Zip *or* 120MB LS120 cartridges just £14.95/1 or £34.95/3

- Ideal for backing up your work and transferring multimedia data between Amigas and/or other platforms
- Zip drive reads and writes 95MB PC & Mac formatted Zip carts directly from ShapeShifter. Eyetech ZipPrepTools v2.0 included.
- LS120 drive reads and writes standard PC formatted 720KB &1.44MB diskettes and Amiga or PC formatted120MB carts.
- In CDROM speed terms,the transfer rate of the Zip is equivalent to about 4-speed and the LS120 to about 1-speed.
- EZ-IDE software (or software with equivalent functionality) is required. Get it for just £17.50 (ie 50% off) with either drive.
- **Both Zip and LS120 drives fit in any Amiga/desktop/mini tower/EZ-Tower floppy drive bay or in external case (£9.95)**

Both drives AF 'Gold' award (LS120 - 92%, Zip - 91%)

EZ-Key

- Autodetects and remaps Amiga and PC keyboards
- Choice of two keyboard-selectable PC key mappings

"The nicest keyboard adapter we've come across..." Cu Amiga

EZ-Key alone - just	*£39.95*
EZ-Key and Win95 k/b bundle	*£49.95*
EZ-Key and A4000 k/b bundle	*£79.95*

[illegible]	Tower converter cab HD-M -> FD-F	4.95
[illegible]	HD/FD pwr splitter HD-M->1xHD-F/1xFD-F	6.95
[illegible]	FDD power splitter 4pM->2xFD-F	6.95
[illegible]	HD/CD pwr splitter 4p-M ->2x 4p-F 15cm	6.95
[illegible]	HD/FD pwr splitter HD-M->2xHD-F/1xFD-F	8.95
[illegible]	HD power splitter HD-M -> 3xHD-F	8.95
[illegible]	Tower power expdr 4pM->3x4pM+FDDpwr	11.95
CDROM systems		
[illegible]	[illegible] component CD sys with CDROM s/w	99.95
[illegible]	[illegible] component CD sys with CDROM s/w	119.95
[illegible]	CDPlus Desktop 20 speed with CDROM s/w	119.95
[illegible]	CDPlus Desktop 32 speed with CDROM s/w	139.95
[illegible]	CDPlus Desktop Writer 2/8 speed w/MakeCD	389.90
[illegible]	CDPlus EZ Tower 20 speed with CDROM s/w	189.90
[illegible]	CDPlus EZ Tower 32 speed with CDROM s/w	209.90
[illegible]	CDPlus EZ Tower Writer 2/8 speed w/MakeCD	459.85
[illegible]	CDPlus MiniTower 20 speed with CDROM s/w	119.95
[illegible]	CDPlus MiniTower 32 speed with CDROM s/w	139.95
[illegible]	CDPlus MiniTower Writer 2/8 speed w/MakeCD	389.90
[illegible]	CDPlus Gold system 20 speed w/ EZIDE s/w	149.95
[illegible]	CDPlus Gold system 32 speed w/ EZIDE s/w	169.95
[illegible]	CDPlus Gold sys Writer 2/8x w/MakeCD,EZIDE	419.90
Tower systems, [illegible]-tower/D-top/CDROM/Zip/LS120 cases		
[illegible]	CDROM case (IDE, audio cntr, 40Wpsu, CE)	59.95
[illegible]	Desktop case with 200W+ psu for HD/CDROM	39.95
[illegible]	Full PC tower, 200W PSU, modable for A12	59.95
[illegible]	Full A1200 Tower 250WPSU,LED adpt,FD cab	99.95
[illegible]	A1200 EZTower purch'd with CDPlus system	89.95
[illegible]	EZTower conversion kit - No PC tower	39.95
[illegible]	EZTower kit w bezel for self conversion	79.95
[illegible]	Full A1200 EZTWR, EZKEY i/f, Win95 kbd	148.95
[illegible]	External 3.5" HD case no psu	19.95
[illegible]	Removeable drive case for 3.5" HD (metal)	24.95
[illegible]	MiniTower case with 200W+ psu for CD/HD	39.95
[illegible]	Metal slim case-FDD/IDEZip/SyQuest/LS120	9.95
[illegible]	A1200 to EZ Tower fitting - A1200 +1 drive	30.00
[illegible]	Fitting per customer-supplied periph into EZtwr	7.50
[illegible] driver software		
[illegible]	CamControl s/w w/ 1 Amiga Camera driver	39.95
[illegible]	CamControl/PortJnr bundle (w/ 1 Camera driver)	69.95
[illegible]	Amiga driver for Epson Stylus range WB3+	24.95
[illegible]	IDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drvr	34.95
[illegible]	Pic upgrade to EZIDE from compet product	19.95
[illegible]	EZIDE/ATAPI enhancer/CDROM s/w bundle pri	17.50
[illegible]	Pic upgrade to EZIDE from Eye-sup IDEfix	12.50
[illegible]	ScanQuix3 w/ 1 Amiga scanner driver	59.95
[illegible]	TurboPrint 5.x Amiga printer driver	36.95
[illegible]	TurboPrint 6.x Amiga printer driver Engl	38.95
[illegible] drives, floppy drive, CDROM, LS120, Zip & CD writers		
[illegible]	Bare 20 speed CDROM mechanism	49.95
[illegible]	Bare 32 speed ATAPI CDROM mechanism	69.95
[illegible]	Internal ATAPI CD-R 2xwrite 8xread w/MakeCD	289.95
[illegible]	Replacement A1200/600 int FDD 880KB	24.95
[illegible]	Bare 1.44MB FDD for tower (needs i/f)	24.95
[illegible]	Twr int 880KB FDD(Sony/EZDFD/cab bundle)	39.95
[illegible]	Twr int 880KB FDD (Sony/EZDFD) No cable	34.95
[illegible]	1.08GB 2.5" Hard Drive	159.95
[illegible]	1.4GB 2.5" hard drive for Amiga	169.95
[illegible]	1.6GB 2.5" Hard Drive	179.95
[illegible]	170MB 2.5" hard drive	69.95

HD2-21	21MB 2.5" hard drive 90 days warranty	34.94
HD2-540	540MB 2.5" Hard Drive	119.95
HD2-720	720MB 2.5" hard drive	129.95
HD2-810	810MB 2.5" Hard Drive	149.95
HD3-1.2	1.2GB 1" x 3.5" TowerDrive for Amiga	109.95
HD3-1.2-UF	1.2GB 1" x 3.5" unformatted IDE HD	99.95
HD3-1.7	1.7GB 1"x3.5" HD non-InstantDrv for Tower	119.95
HD3-1.7-UF	1.7GB 1"x3.5" unformatted IDE HD	109.95
HD3-2.1	2.11GB 1"x3.5" non-InstantDrive for twr	139.95
HD3-2.1-UF	2.11GB 1"x3.5" unformatted IDE HD	124.95
HD3-2.5	2.56GB 1"x3.5" IDE HD TowerDrive - Amiga	149.95
HD3-2.56	2.564GB 3.5" InstantDrive for Amiga	199.95
HD3-3.2	3.2GB 1"x3.5"HD non InstantDrv for tower	164.95
HD3-3.2-UF	3.2GB 1"x3.5" unformatted IDE HD	149.95
HD3-4.3	4.3GB 3.5" IDE drive for tower system	199.95
HD3-4.3-UF	4.3GB 3.5" IDE drive for tower system	189.95
HD3-LS120	Panasonic LS120 floppy/optical 1.4/120MB	89.95
HD3-LS120-CT1	Single 120 MB cartridge for LS120 drive	14.95
HD3-LS120-CT3	3-pack of 120MB (nominal) LS120 carts	34.95
HD3-ZIP-CT1	Single 100MB (nominal) Zip cartridge	14.95
HD3-ZIP-CT3	3-Pack of 100MB (nominal) Zip cartridges	34.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	89.95
Keyboards, mice, PSU's, misc hardware & software		
FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95
FAN-FG-60	Finger guard for 60mm cooling fan	4.95
FAN-LP	Low profile fan 45x45x11mm 12v w/heatink	12.95
KBD-A1000	A1000 keyboard with 6-pin mini-Din cntr	44.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable	24.95
KBD-A4000	A4000 keyboard with 6p mini-DIN cntr & 5p adpt	39.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT DIN pl	19.95
MOD-EXT-14	Modem AT 14.4dat/14.4 fax+EU psu/tel cab	19.95
MON-17-.26	17" mon 135MHz b/w .26DP 1600x1280@75Hz	399.95
MOU-BLK	Amiga mouse - black - with mousemat	8.95
MOU-MAT	Mouse mat	0.99
MOU-WHI	Amiga mouse - white/cream -with mousemat	6.95
PLUG-IEC	Rewirable IEC monitor plg for PSUs/MT/DT	4.95
PSU-230	230/250w replacement PSU for MT/DT/FT	29.95
PSU-A1200	A1200 23W PSU (original) 90 days warranty	19.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F	19.95
SCN-FBA4-BDL1	SCSI A4 Flatbed scnr 300 dpi & SQ3 Mus s/w	179.95
SPK-2W	2xamp/spkrs 16W P MPO no PSU 3.5mm jack	8.95
SPK-2W-PSU	Mains PSU for SPK-2W	4.95
SPK-60W-INT	Internal mounting 60W PMPO speakers/amp	24.95
VID-CAM-COL	Colour videoconf camera composite video	159.95
VID-CAM-PSU	PSU for colour video camera	9.95
VID-PRGB-PCM	Prograb 24 digitser w/ PCMCIA i/f	119.95
DISK-880	880KB blank diskettes duplication quality. Pk 50	14.50
NET-REF	Internet reference book	4.95
CD-SW-PK1	CD software pack 1 - 5 x Amiga CDROMs	10.00
SYS-WB3-DSK	Amiga WB3.0 disksx5 + Eyetech HD install	14.95
SYS-WB3-SET	Amiga WB3.0 disks x5 + Worbench manual	18.95
SYS-WB3.1-DSK	Amiga Workbench3.1 disks x6 (/w HD inst)	14.95
VID-CKT	Cocktel Amiga videoconferencing s/w	49.95
Accelerators and memory		
ACC-PPC-16-4025	Blizzard PPC603/160MHz+040/25/FPU no SCSI	238.95
ACC-PPC-16-6050	Blizzard PPC603/160MHz+060/50/FPU no SCSI	438.95
ACC-PPC-16S-4025	Blizzard PPC603/160MHz+040/25/FPU/SCSI-2	288.95
ACC-PPC-16S-6050	Blizzard PPC603/160MHz+060/50/FPU/SCSI-2	488.95
ACC-PPC-25-4025	Blizzard PPC603/250MHz+040/25/FPU no SCSI	348.95
ACC-PPC-25-6050	Blizzard PPC603/250MHz+060/50/FPU no SCSI	568.95
ACC-PPC-25S-4025	Blizzard PPC603/250MHz+040/25/FPU/SCSI-2	398.95
ACC-PPC-25S-6050	Blizzard PPC603/250MHz+060/50/FPU/SCSI-2	618.95

ACC-060-50	Apollo '060 MMU/FPU 50MHz A1200 accel	268.95
ACC-060-66	Apollo '060 MMU/FPU 66MHz A1200 accel	319.95
ACC-040-25	Apollo '040 MMU/FPU 25MHz A1200 accel	128.95
ACC-040-33	Apollo '040 MMU/FPU 33MHz A1200 accel	158.95
ACC-040-40	Apollo '040 MMU/FPU 40MHz A1200 accel	188.95
ACC-30LC-25	Apollo 030/25MHz/MMU/FPU (8MBmax) accel	68.95
ACC-30LC-25+4	Apollo 030/25MHz/MMU/FPU + 4MB (max 8MB)	79.95
ACC-30LC-25+8	Apollo 030/25Mhz/MMU/FPU w/ 8MB (max)	89.95
ACC-30LC-33	Apollo 030/33MHz/MMU/FPU (8MBmax) accel	79.95
ACC-30LC-33+4	Apollo 030/33MHz/MMU/FPU w/4MB (8MBmax)	89.95
ACC-30LC-33+8	Apollo 030/33MHz/MMU/FPU w/8MB (max)	99.95
ACC-30EC-33	Apollo 030EC/33MHz no MMU/FPU (8MBmax)	49.95
ACC-30EC-33+4	Apollo 030EC/33MHz noMMU/FPU w/4MB(8max)	59.95
ACC-30EC-33+8	Apollo 030EC/33MHz no MMU/FPU w/8MB (max)	69.95
ACC-30EM-33	Apollo 030/33MHz/MMU no FPU (8MBmax)	49.95
ACC-30EM-33+4	Apollo 030/33MHz/MMU no FPU w/4MB(8max)	59.95
ACC-30EM-33+8	Apollo 030/33MHz/MMU no FPU w/8MB (max)	69.95
FPU-EC/M-33	33Mhz PLCC FPU pur'd with Apollo 30EC/30EM	10.00
ACC-630-33	Apollo '030 MMU/FPU 33MHz A600 acc to32M	69.95
ACC-630-33+4	A600 accel 030/33MHz/MMU/FPU/4MB (max8)	79.95
ACC-630-33+8	A600 accel 030/33MHz/MMU/FPU/8MB (max)	89.95
FPU-PGA-40	MC68882 PGA FPU 40MHz OK for 50MHZ	39.95
FPU-PLC-33	MC68882 33Mhz PLCC FPU no xtal	24.95
FPU-PLC-33X	68882 33Mhz FPU & xtal for accl/mem bds	29.95
FPU-XTL-33	33MHz crystal oscillator for FPU	5.00
MEM-16MB-72P	72 pin 16MB 32 bit simm for Amiga	34.95
MEM-32MB-72P	72 pin 32 MB 32 bit simm for Amiga	69.95
MEM-4MB-72P	72 pin 4MB 32 bit simm 70 ns	13.75
MEM-8MB-72P	72 pin 8MB 32 bit simm for Amiga	24.95
MEM-ZIP-20P	1MB(2chip)60ns Zip RAM HM514400-6 Pg md	14.95
PT-EXT-PLCC	PLCC extractor tool for 33Mhz FPU	9.95
ACC-4/60-SSKT	Apollo 1240/60 2nd simm socket & fitting	20.00
REP-AM-2B/1D4	A1200 motherboard rev 2B or 1D4 fix	30.00
EZPC-Tower & Siamese systems & components		
CDR-BARE-2/8-SP	Internal ATAPI CD-R 2xw 8x u/g with EZPC pkg	249.95
EZPC-SIA-CF2	EZPC SiSys Enet 3.2/64/32x/32v/sw-mpg	999.95
EZPC-SIA-CF2-UG	EZTower/EZKey/kbd u/g to EZPC-SIA-CF2	879.95
PSW-W95/SS97	Windows 95 & Lotus Smartsuite 97 bundle	99.95
SCAN-SCEX-6KSP	Mustek ScanExpress 6000SP w/PC SCSI card	129.95
SYS-NETPC	Network PC Amiga-PC network s/w	19.95
SYS-SIA-ETH	Siamese sys2.5 w/PC,Amiga ethernet	199.95
SYS-SIA-R25	Siamese system software RTG v2.5	99.95
SYS-TCP-SIA	Miami TCP/IP stack for Amiga (Siamese only)	19.95
SYS-TCP-MIA	Miami TCP/IP stack for Amiga (reg'n fee prepaid)	29.95
CD32, SX32 & accessories		
ADPT-KBD-SX32P	SX32 Pro PC k/b adapter cable 0.1m	9.95
CD32-JOY	CD32/SX32 joypad	9.95
CD32-PAL	CD32 console with 18Wpsu/joypad/RF lead	149.95
SX32-MK2	SX32 Mk2 Ram/Clock/FPU expander for CD32	149.95
SX32-P40EC	SX32Pro030EC 40Mhz simm to 64MB, FPU skt	199.95
SX32-P50	SX32 Pro 50MHz '030/MMU Simm, FPU skt	269.95
A1200 Magic Packs & accessories		
A12-MGK-FDD	A1200 Magic pack FDD vers /w s/w as advt	189.95
A12-MGK-FDTWR	A1200 magic pack with EZtower	349.95
A12-MGK-HD170	Amiga Magic pack w/170 HD & s/w	249.95
A12-MGK-MTCD	Amiga M P 16xCD/1.2GB/'040-25/16MB/MT	599.95
A12-MGK-PDV2	A1200 Mgk pk 170MB/'030-33/8MB	329.95
A12-MGK-PRO2	A12 EZTwr Pro2 '040-33/16mb/2.1/PCkb/16CD	799.95
ACC-30LC-25+8-SP	Acc 030/25/MMU/FPU/8MB w/ A12-MGK-FDD	79.95
ACC-30LC-33+8-SP	Acc 030/33/MMU/FPU/8MB w/A12-MGK-FDTWR	89.95
HD3-1.2-SP	1.2GB TowerDrive with A12-MGK-FDTWR	89.95
HD3-LS120-SP	LS120 120/1.44/.72MB with A12-MGK-PRO2	84.95

ScanQuix3 Software

for all Epson parallel or SCSI & HP, Mustek, & Artek SCSI scanners

"An excellent piece of software"
Gold award - Amiga Format 11/97

- 24 bit scanning with full range of editing options
- 'Scan-to-disk' option in Jpeg or IFF
- Stand-alone use or integrates with your Art package (Photogenics, ImageFX, AdPro, XiPaint, Pagestream 3, DPaint5, ArtEffect, PPaint)

ScanQuix v3.0 *only* £59.95

Eyetech Group Ltd

The Old Bank, 12 West Green, Stokesley, N Yorks, TS9 5BB, UK

Tel : 07000 4 AMIGA 07000 4 26442
01642 713 185 +44 1642 713 185
Fax: +44 (0) 1642 713 634
Net: sales@eyetech.co.uk info@eyetech.co.uk
www.eyetech.co.uk

Next Day delivery to EC and USA/Canada. Worldwide in 2-7 days from receipt of faxed order & payment details.
UK next day insured delivery charges. Ring/fax/email for other options. S/w, cables, EZCD i/f £3; 2.5" drives, accel's; manuals £7; 3.5" drives, FDD's; PSU's, SX32 £9; CDPlus; M'Twr; D'top £11; EZTW & EZPC £15.

UK bank/BS cheques, Visa*, Mastercard*, Switch, Delta, Connect, Postal/Money orders accepted. * A 3% charge applies to c/c orders.Due to space limitations some of the specs given are indicitive only - please ring/write for further details. **Please check prices, specs and availability before ordering. If ordering by post please include a contact phone no.** Goods are not supplied on a trial basis. A1200 items are tested with a Rev 1.D.1 motherboard - other boards may need modification.E&OE. All prices include VAT at 17.5%. Non-EC orders are VAT-free.

Voted AUI Amiga Company of the Year

EYETECH

GAME CR

EVER WANTED TO MAKE YOUR OWN VIDEO GAMES? NOW'S AS GOOD A TIME AS ANY TO MAKE A START, WITH SOFTWARE ON THE COVERDISKS AND AND OUR VIRTUALLY COMPLETE GUIDE...



There's a lot to be said for the idea of making your own computer games. It's one of the most all-round challenging, creative and satisfying things you can do with a computer, and in the Amiga you have an ideal development system. For some people, creating games is far more enjoyable than playing them. For others it's a double-headed coin. Not only do you get to work on the concept, design, graphics and soundtrack, but you get your own personally crafted game to play at the end of it.

This month's cover disks contain the Reality game creator and there's even more on the CD, including Shoot 'em Up Construction Kit and some more advanced development tools. That lot is enough to give anyone an initial leg up into the world of video game creation. Over the next few pages we'll be discussing the various aspects of game design, with help and advice from the professionals, to form a solid base from which you can launch your ambitions.

WHERE TO START?

If you've never designed or written a game before, don't expect to be able to take over the world with your first attempt. Don't kid yourself that the game-playing public are going to be thrilled with your earliest productions if they're based on concepts that have been kicking around monitor screens for the past couple of decades. Even so, sometimes the best place to start is just there: at the start. If you can knock up a half decent Space Invaders or Pac Man, even if it's not for public consumption, at least you'll have given yourself a basic grounding in the fundamentals (how to move sprites, collision detection, point scoring, character animation etc).

We'll cover the sticky subject of programming a little later on, but even if in the long run you don't intend to get your hands dirty with the programming side of things, it wouldn't hurt to have a tinker with a high level language (such as Blitz Basic) or at least a game creator in order to get your head around the kind of logic involved in the process.

EATION

THE IDEA

Assuming we are setting our sights above clones of ancient coin-ops, let's see what we're letting ourselves in for. First of all, we must have an idea. That idea could be to rip off a game from another platform, but that's going to bypass most of the fun of game design and creation, so we'll assume this idea is for a new game concept. Good ideas are obviously better than bad ones, but how do you come up with them, and then what do you do with them? Over to Sensible Software's Jon Hare:

"The process of coming up with game ideas is really pretty straightforward, you just learn to keep hold of the good ideas that filter through your mind and then build on them. Many people have good ideas but they are either bad at:

a) recognising a good idea from a bad one, normally because they are more focussed on their involvement in the idea and are therefore either too protective or too dismissive of it because it is theirs, rather than concentrating on the main issue which is, is it a good idea or a crap idea. Objectivity is the key to producing a good product. There is no room for personal ego problems in good design. Or...

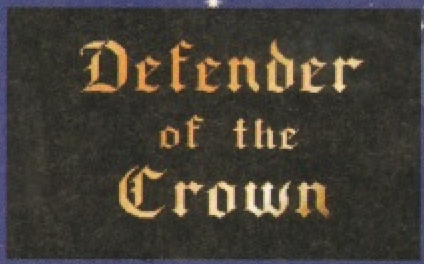
b) working that idea and seeing it through, being comfortable with manipulating it, trimming it, reinventinting bits of it, binning things that don't work.

"The key is that with experience you learn instinctively to quickly dismiss bad ideas and develop good ones. However, you can only control the thoughts in your own head and working in larger and larger teams introduces a whole new problem of idea communication, and the fact that your visualisation of an idea on paper may be very different to mine. These problems need a whole new set of skills to be coped with properly.

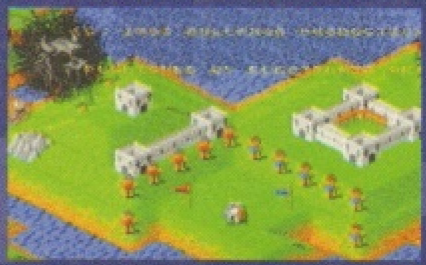
"Generally the rule for good design is to consider everything, but to be very selective at what you actually go for and to always carry the bigger picture of the whole game in your mind at all times. Consider this during every decision you make, no matter how small, regarding all aspects of the game's creation."

EVOLUTIONARY NODES

You could spend your days building the 1,000th Bomberman clone, or you could hijack the course of video gaming history – it's your choice. To help you out on the inspiration front, here are ten games that skewed the evolutionary path off at a tangent for one reason or another. Some marked the start of completely new genres, while others took an existing concept and put a radical new spin on it. We've deliberately left out the late 70s and early 80s coin-ops that spawned the whole idea of video games (eg. Space Invaders, Scramble, Pac Man etc), so don't write in! No doubt you'll have your own favourites to add to the list as well.



DEFENDER OF THE CROWN
Cinemaware exploited the Amiga's revolutionary graphics potential, bringing us the first ever "interactive movie".



POPULOUS
Another genre-defining moment came with Bullfrog's invention of the God simulator.

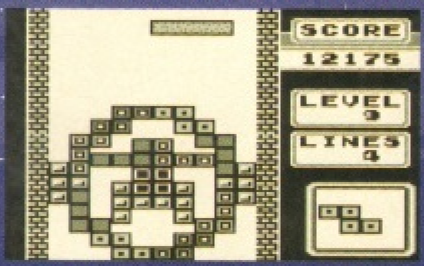


WOLFENSTIEN 3D
The forerunner to Doom and Quake started the 90s 3D gaming revolution.

LEADERBOARD
Solid 3D graphics, a control method pinched by every subsequent golf game, and motion capture too!

FOOTBALL MANAGER
The name says it all. The curly-topped Kevin Toms should be a millionairre now (but probably isn't).

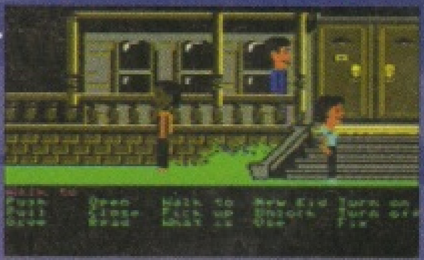
KICK OFF
Previously balls were stuck firmly to feet and pitches viewed strictly from the side (apart from Tecmo's World Cup coin-op).



TETRIS
From Russia with squares, Tetris proved dull-looking puzzle games could conquer the world.



VIRTUA FIGHTER
The first example of the inevitable 3D adaptation of the Street Fighter theme.



MANIAC MANSION
Lucasfilm Games defined the format for graphic adventures for the next ten years.

MERCENARY
From the mind of Paul Woakes, this was the original virtual reality adventure.

DESIGN GUIDELINES

SO YOU'VE GOT AN IDEA FOR A GAME AND YOU THINK IT'S A WINNER. WHERE DO YOU GO FROM HERE?

Assuming you have the technicalities of the game 'engine' in hand (options are discussed on page 29) it's time to go about building your game. If you are working in a team it's essential that you, or someone you nominate, takes control of the project. Give yourself or this nominee the title Project Manager and everyone will know who to take orders from. As the Project Manager it will be your responsibility to communicate the original concept to the team so that everyone understands it completely. It's no use having a team of people pulling in different directions – that's not a team at all, just a group of people working on a common project. Strange as it may seem, even if you are working on the game alone, it's still worth doing this anyway so that you can keep track of your original vision.



One of the first things you could do as Project Manager would be to provide some reference material for the various members of the team. That would often take the form of sketches or even full blown storyboards to show how the game should look. You could blather on about the plot and characters till the cows come home, but if the team is unsure of whether it's a top-down war game, a 3D Quaker, a scrolly shooter or whatever, wires will be crossed from the outset.

FIRST STEPS

Before you dive headlong into the project, throwing resources and big ideas around with gay abandon, you should first find out whether you really are onto a winner or not. Imagine you spent two months formulating an incredibly clever web of characters, events and locations, only to find that your actual game was as much fun to play as sub-aqua nudist leapfrog. Actually, I that doesn't sound too bad...

The point is that you should get a rudimentary version of your game up and running as soon as possible. Some simple graphics and just one level or a handful of locations should be enough to give you a rough idea of whether you can pull it off or not. Sometimes that's as far as you need to go (just look at Tetris for example). It's at this stage that you should be checking out the 'feel' of the game. Is it really as much fun as you thought it would be? If you can enjoy messing around with a very basic engine and hardly any objects/locations/aliens/whatever, then it's a good sign that you've got yourself the makings of a good game.

This is especially the case if you are designing some kind of sports game, in which the fun will be determined almost entirely by the direct satisfaction gleaned from controlling the player's characters (as opposed to being able to fall back on the lure of new levels, new enemies and so on as in an arcade or adventure game).

GENERAL ADVICE

It's no good saying things like "In a good game, player will never be granted more than five lives" or "A game must contain humour in order to be fun". That kind of thinking will only box you in. The best games come about from the designers having that instinctive understanding of what will make their particular game better than the rest.

Even so, it won't do any harm to give some thought to how games currently manage to entertain, and how others fail. By way of some food for thought, here are some extracts from a paper written by Steve Hammond to remind the development team at Devil's Thumb Entertainment what they should be aiming for when designing levels for a game called Winter's Fury, a strategy adventure RPG type thing inspired by Hired Guns.

"The Ultimate Irrevocable Law of Game Design That Cannot be Transgressed Ever: Never ever everfrustrate the player."

You see, there's a law and already it begs to be differed with. Personally, I hate to be frustrated by computer games, but many times I've reviewed a game and marked it down for being too frustrating (ie. not fair as opposed to too difficult), only to hear from players that it's the teeth-gnashing and hair-



DON'T BE AFRAID

Don't be afraid or ashamed to admit that an idea turned out not to be as good as you thought. It's always easier to start from scratch when you're at the beginning of a project. Once you've invested substantial time and energy into a project you're going to be less open to the idea of scrapping it, even though that might be the best option.



pulling inducements that they crave. On with the pearls of wisdom Mr Hammond...

"Mazes are fun to design. That doesn't necessarily mean that they're fun to play unless they're small and manageable. They are perhaps good for setting challenges for your friends, but a player coming into the game cold has one main aim and that is to get to the finish point and see as much that is new and fun along the way. Mazes will hold him back. Where a maze will work is if it is small enough to, for example, cause a momentary disorientation when getting chased by monsters.

"The difference is taking a few seconds to get your bearings and spending ten minutes working out just where the hell you are. It might be argued that a game level is effectively one big maze, but the difference is that a real maze has no markers to distinguish one part of it from another. This means that if the player spends ten minutes in a maze, he is spending ten minutes looking at the same stuff. We might be so damn excited about the neat stuff we've designed further on in the game, but the player won't be seeing it for some time yet. And if he gives up then he'll never see it."

Quite right, and it's also worth considering the opposite of that situation...

"There will be many marvels in the game as a whole. It's tempting to show the player all the neat stuff as soon as possible, but that'll leave nothing for later levels. Spread all the different things out evenly. It's better to have one cool thing in a level and a different cool thing in another, than to have both in the one level and nothing interesting in the next."

"We maintain a level of interest by constantly varying what the player sees as he progresses. Different textures are the obvious way to alter the environment, but it should also include varying the geometry of the level, different corridor shapes, cylinder shaped rooms and so on. Think of a car journey across the country. It feels good as you see the landscape slowly change, as the flatlands give way to mountains which give way to plains and eventually the open sea. It's an achievement and a reward. The player looks at where he is and says "Wow! Look how far I got!"

IT'S ILLOGICAL CAPTAIN

Unless you want to make a game in which things happen for no obvious reason, you should make sure that a game that has adventure , exploration or puzzle elements is logical.

"When the player triggers off something, say by hitting a switch, the result should not be so hidden that the player spends ages trying to find it. Pressing a switch here which opens a doorway on the opposite side of the level is not intuitive at all. In Duke Nukem there was a rather neat way around this. When a switch really did open a door miles away, you could see it opening on a nearby monitor. This leads us to the point: there should always be a connection between what the player does and the results of the action. The player should be able to turn around and see the result, or hear something taking place just to the side. At the very least there should be some kind of clue as to what he has just done. Some indication that the state of something has changed.

"Think a little more laterally than Press Button, Open Door. Say for example we have a nuclear reactor. Shooting a pipe which explodes may not have any obvious connection with being able to enter into the reactor core itself, right? But if the player shoots the pipe, it explodes and he hears the message 'Warning: coolant system has failed. Reactor core has been breached' then he'll know that he can now do something with the core. It has changed the state of something. More subtly in that same example, if the background hum immediately started to rise it's obvious that something is completely screwed with the reactor and it's time to get the hell out of there. Otherwise the player has to learn the painful lesson that if he shoots this, then a minute later he's dead. No indication, no warning, big frustration."



EASY AS 1,2,3 (4,5)

There's no right or wrong way to go about taking your game idea through the design process, but it pays to take a leaf out of the book of some of the more experienced people in the business. We asked Bitmap Brother Simon Knight about the main stages involved in turning an original idea into a full blown game...

1. We first prototype the game idea by creating a one level playable demo, either using existing graphics or by creating the minimum required making it multi-player (two player in the case of the Amiga).

2. Having established that it was as good an idea that we thought it was, a programmer creates a level editor building on the rudimentary systems created above.

3. The designer completes the design based on what was learnt from the demo.

4. According to the design, the artists do all the graphics , the musicians do all the SFX and music , and the programmers create all the routines. The artificial intelligence is largely based on what we discovered by playing the game in the demo attempting to make the computer emulate a human player.

5. The level designers design and implement the levels of the game in a basic graphical form to allow easy changes.

The processes involved in stages four and five are done in an order dictated by the game's designer so that real levels can be built as soon as possible. Thus you start learning about all the flaws in your design as soon as possible and can amend things accordingly.

Typically we create the first level (not necessarily the first level in the game) way, way before any of these stages are anywhere near complete, so all stages are evolving (and hopefully improving) as the game is being worked on.

The existing levels are played over and over again, and early levels are revised to include new ideas. Any that are deemed to be 'finished' are gone over by an artist to make them suitable for release (we call this 'window dressing').

An alpha version of the game is tested internally and externally whilst we play and play the game looking for ways to 'tweak' and improve it; mostly for difficulty.

A beta version is tested and tested for bugs. It's released and we go down the pub!!

THE LOOK & SOUND

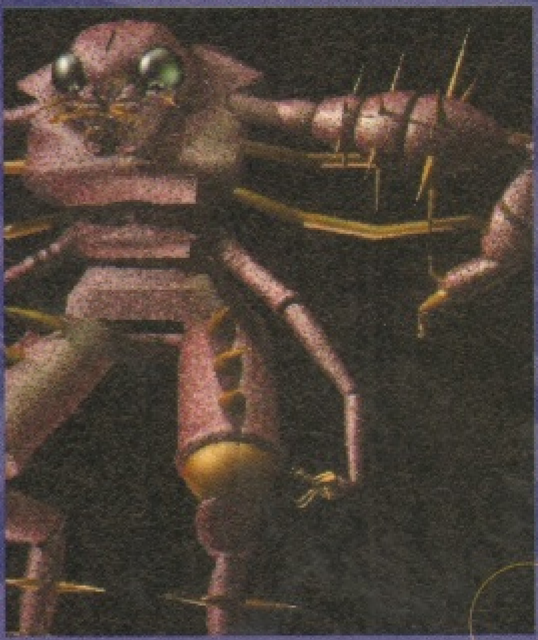
THE WAY YOUR GAME LOOKS AND SOUNDS IS A VITAL PART OF THE MIX. BUT WHAT SHOULD IT LOOK LIKE, AND HOW SHOULD IT SOUND?

It's important that your game has a defined visual style. It's this, alongside the soundtrack, that will give it its character and atmosphere. Atmosphere doesn't have to mean spooky, moody or scary. It could be surreal (remember Weird Dreams?), cute, stark, cubist... You should decide on the look as soon as possible. In fact, you shouldn't really need to think of coming up with a visual style as a separate task – the original concept will generally suggest or even dictate this for you.

It pays to look outside the computer gaming arena for inspiration. Movies, both contemporary and oldies, can be a good source. Then there's the work of specific artists, again both contemporary and classic – from Anthony Gormley to Michaelangelo.

Taking a step back from the computer game whirlpool (OK, so it's more of a paddling pool as far as the Amiga is concerned at the moment) you should be able to see a number of conventions that have recently arisen. For example, it seems to be mandatory that every game released on CD comes with a 3D rendered intro sequence. Sure, these are nice and serve a purpose, but wouldn't it make a refreshing change to see a different style of intro sequence? OnEscapee bucks the trend with its 'hand drawn' intro. Not only does it look different and all the more interesting for it, but it fits well with the game's overall style.

Wouldn't it be nice to see a game intro in the style of this month's cover artwork? The artist responsible for the cover image and the backgrounds used in this feature is Rian Hughes. His is a style, for example, which could be applied not only to an intro



sequence but also an entire game, whether flat 2D or real 3D. That's just one example. Challenging conventions is one way to make your mark. Banging out a game that looks (and plays) just like a thousand others won't get you far. For an example of a game that seemlessy combined a stunning visual style with its soundtrack, look no further than Captain Blood. Which brings us neatly to...

SOUNDTRACKING

Don't forget to get the soundtrack sorted out – a good one can put the icing on the cake. Who could forget the magical sounds created by Rob Hubbard in his C64 heyday? One highlight was the music for Delta – the shimmering synth sounds evolved, peaked and dipped as the player progressed through the slick scrolling levels. As with the visuals, it's worth studying the movies for tips on how to use sound effects and music to create the required mood. For example, if your game included a feature where the player gained superhuman strength for a short time by picking up a power pill, the music could change pace accordingly, reverting back to a more restrained subconcious level once the effect of the pill had worn off. Likewise, sometimes it's a good idea to link specific pieces of music to certain locations.

But what of the technicalities? If your game is to be released on CD, then you have the option of using CD audio tracks. This gives you the freedom to compose and record your music with whatever equipment you can lay your hands on. That could include full vocals, live instruments and all sorts of studio gadgetry. The most common method with Amiga games is to write the music with a tracker, which can then be played by a routine within the game code. Quake has the option of replaying its audio via AHI for full 16-bit output through a sound card, although this method can make heavy demands on the CPU. Whilst not strictly Amiga relevant, Simon Knight of the Bitmaps had this to say:

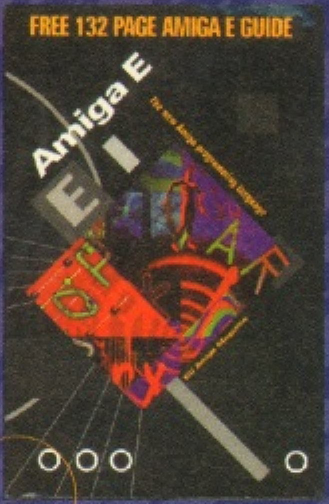
"The stuff we are currently doing is stored and played on the PC in our own proprietary formats. However, it is originated on the Mac in standard SD2 and AIF files. We don't use CD audio as it connot be controlled sufficiently, though all our new stuff is in 22kHz 16-bit stereo"



The trademark Sensible Software look evolved "by accident, although the 'if it ain't broke don't fix it' mentality does tend to creep in after a while".



TOOLS OF THE TRADE



YOU'VE GOT THE IDEAS, GRAPHICS AND SOUNDTRACK... SOONER OR LATER YOU'LL HAVE TO PUT IT ALL TOGETHER.

When it comes to creating your game 'engine' there are a number of ways you can approach it. You'll find the Reality game creator on this month's cover disks, and on the CD there's that along with a whole load of other game development tools, including Shoot 'em Up Construction Kit, Blitz Basic tools, map editors and more advanced programming bits and bobs. If the idea of programming in raw assembler makes you shudder, the likes of Reality are well worth a try. Conversely, the inevitable restrictions imposed by systems that do all the hard work for you might not allow you the freedom to realise your game plan. Fortunately there are a number of feasible options between the two poles.

REALITY

This offers one of the quickest and easiest ways of creating a game. In effect you reverse engineer one of a range of pre-programmed games, changing as much or as little of it as you see fit in order to make something new. You will need to understand some basic concepts about variables in order to keep track of players lives, objects, levels, sprite patterns and so on, but this is about as easy as it gets.

SEUCK

Shoot 'em up Construction Kit works along similar principles to Reality, except that by definition it's limited to making shoot 'em ups. You can make either vertically scrolling or static screen games which can have a simultaneous two-player mode. Examples of games you could write with SEUCK include Commando, Robotron and Xevious. It's a bit easier to use than Reality, but has similarly disappointing technical qualities (jerky scrolling etc).

BACKBONE

Also on the CD this month, Backbone fits in somewhere between the previous two. It's best for creating scrolling arcade games, shoot 'em ups and platform games. It has a more friendly interface than Reality, but once again the results can be disappointingly plain. It's quite capable of making little games to be played among your friends.

AMOS

And so to the programming languages. AMOS is one of the most popular for beginners due to a couple of factors. It's easy to learn, with its roots in BASIC. Secondly it comes with its own routines for handling sprites, scrolling screens, accessing disks, playing music and so on. However, AMOS does have many 'quirks', such as its dislike of the Amiga's operating system (which AMOS throws out with the bathwater the moment it's started). The Valhalla series is the most well known product of AMOS. Reality is written in AMOS too...

BLITZ BASIC

Now we're starting to get somewhere. Blitz Basic is very similar in theory to AMOS, but in practice is a whole lot better. As with AMOS, it's a kind of extended BASIC with specialist commands for handling graphics and sound. The best example of a Blitz Basic game is Skidmarks, priving that commercial quality games are possible.



INFORM & TADS

You could choose to write adventure games instead. Last month we covered the recent developments in the area of multi-platform 'interactive fiction'. For convenience we've repeated the Inform and TADS text adventure game creator systems on this month's CD. These allow you to write your own interactive fiction adventures from scratch, but within an existing framework which takes care of movement around your world, and most importantly, handles all the 'parsing' of the player's text input.

C

This is where it gets serious. C isn't the ideal language if speed is a major factor in your game (ie. fast scrolling, 3D texture mapping etc) but it is the most sensible all rounder. C is also a very portable language, so a game 'engine' written in C for a 680x0 Amiga will be portable to PowerPC with a few adjustments and a recompile. C (when compiled for a 680x0 Amiga) is a good choice for strategy and adventure games. Looking to the future, C is the way to go for anyone serious about programming games. The Storm C compiler and the all-important Amiga 'includes' were given away free with the August 1997 issue of CU Amiga.

AMIGA E

It's debatable whether it's worth investing time learning this fairly fast and versatile language, not because it's no good, but because it's slipping out into the realms of obscurity right now. Learning a programming language is no small task, so you'll probably not want to go through the process again in a year or two's time, which unforunately means this C-like language won't be at the top of your list. Amiga E was given away free, with a guide book, on the December 1995 issue of CU Amiga.

ASSEMBLY

This is the closest you can get to talking your computer's language. Probably the only reason you would want to program assembly is speed. When ClickBOOM converted Quake from the PC original, they took the C source code and re-wrote all the time critical routines in assembly to maximise the frame update rate. The PC version was all written in C.

MY HEAD HURTS!

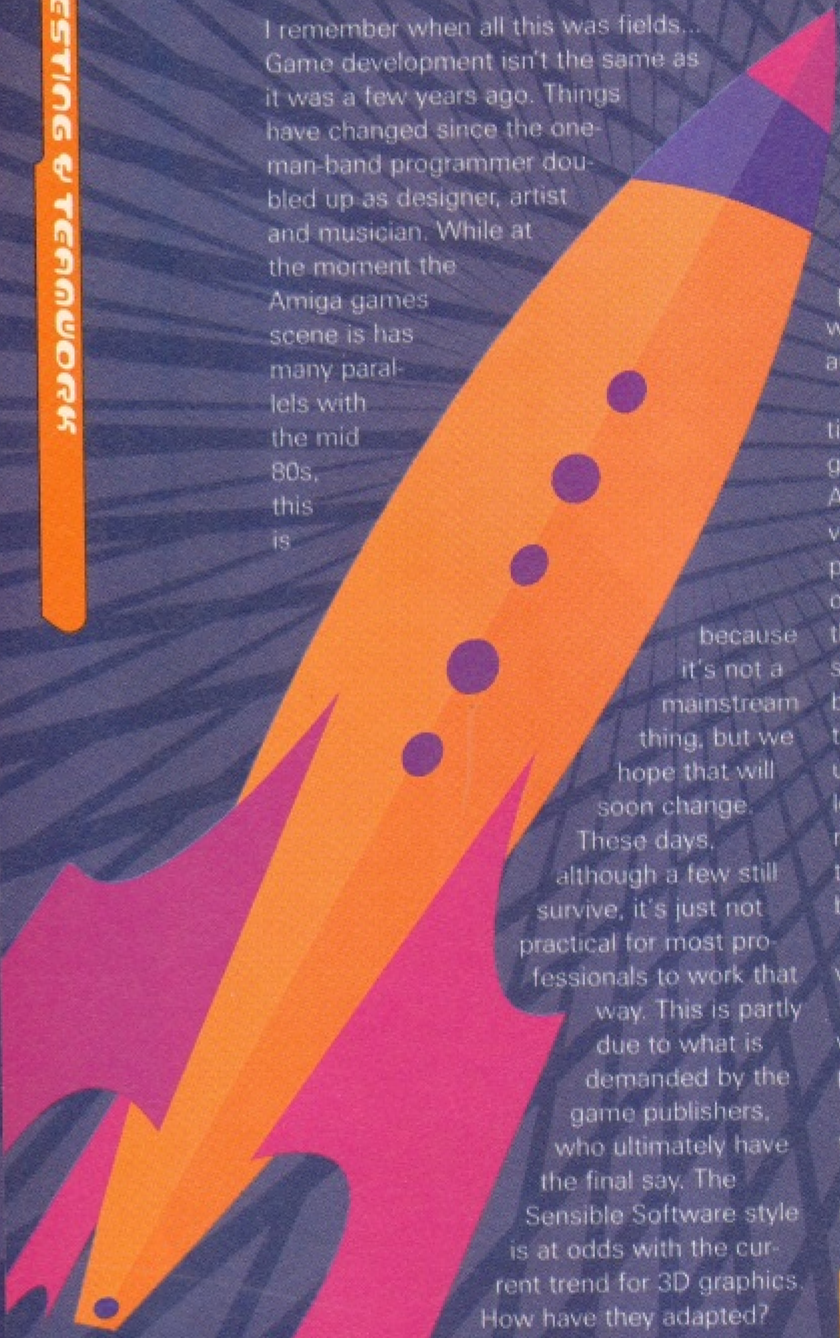
If you're not an expert programmer doesn't mean you have nothing to offer the world of video games. Let the programmer do the programming while you get on with the design/graphics/music/whatever. And don't forget that you'll find some additional tools and packages on this month's CD.



STATE OF THE ART

PLAYTESTING & TEAMWORK

COMPUTER GAME DEVELOPMENT IS A FAST MOVING BEAST AND PAYS TO KEEP AN EYE ON CURRENT AND FUTURE FADS...



I remember when all this was fields... Game development isn't the same as it was a few years ago. Things have changed since the one-man-band programmer doubled up as designer, artist and musician. While at the moment the Amiga games scene is has many parallels with the mid 80s, this is because it's not a mainstream thing, but we hope that will soon change. These days, although a few still survive, it's just not practical for most professionals to work that way. This is partly due to what is demanded by the game publishers, who ultimately have the final say. The Sensible Software style is at odds with the current trend for 3D graphics. How have they adapted? Jon Hare:

"'It's not as much fun as it used to be', is a very true statement. In the C64 days me and Chris [Yates] could have a laugh and get on with writing each game in less than a year and effectively it was like being in an indie band for an indie label. Our overheads were low and the product was everything. Now we employ about 20 people, we have to be legally aware, we are working with big corporations, we are working on an unstable ever changing platform, our overheads are hideous and everything we buy loses value very quickly. Games standardly take a multiple of years to finish.

"We have suffered more than most in the last few years firstly because we were so dominant on the Amiga that we had the most to lose, secondly because we are not particularly corporate. We are a difficult company for corporations to get their heads round. Thirdly because loads of people working in this industry don't know who we are just because the Amiga and C64 are history (not that I'm bitter or anything).

"Three years ago we were offered four times as much money to develop a new PC game instead of another Amiga game – the Amiga market was closing up before our very eyes. Just yesterday someone for a top publisher asked me why we decided to work on animation and 3D like we have in the past three years. It made me want to cry: the reason we took the fancy graphics route is because the market forced us to, because three years ago it's what people wanted and unfortunately good original games do take a long time to make. The fact that the market now wants us to do what we were doing three years ago doesn't help us at all, because

a) we are still finishing off the games it wanted three years ago and

b) in two years time when any new game we might start now would be finished it will probably have changed its mind again."

The Bitmap Brothers have also witnessed the change, the main differences being:

"More people, bigger games! As we learn more, we can do more so the games



become more sophisticated. Particularly with CD-ROM the size of games increased; you can include more levels, more graphics, more sound and start doing really clever things with it. With 3D some of the time taken to create, and especially revise, in-game graphics may have decreased but cut scenes appeared and these can take a long time.

"Also the industry has changed a lot

PLAYTESTING

Playtesting is an essential part of a game's development. Its purpose is generally two-fold: to locate bugs and make sure the game is as playable as possible. As with beta testing of productivity software, it pays to have a few people testing your game at once. Different people will find different flaws. John Hare:

"Basically the playtesting we do is different to the role that the playtesting departments of publishers provide. As I am generally the person coming up with the game design specifications, it is generally up to me to make sure that these have been carried out properly and also to actually work out whether my initial idea was that good in the first place or whether it needs binning or tweaking. So I test/play the game to make sure it is as good as it can be and other people test it in house to feed back opinions on how they feel about it. It is also a useful way of creating a To Do list for the game. We do try to avoid the bug testing and translation string testing in house as much as we possibly can, as this is not really part of the creative process and therefore is best done by the testers working for our publisher."



around us, with games becoming much more mass market. There are now some really big players who take life (and especially money) considerably more seriously than in the old days."

TEAMWORK

While working in teams is a solution to getting your game developed on time and to high standards, it also throws up new problems. Relinquishing direct control of certain areas, the team leader may need to take on less stimulating jobs. Jon once again:

"Chris is not so invlolved in the day to day running now although he is still running the Network and is still a Joint Director with me. I spend my time either doing design/director work, which I still really enjoy or business. To be honest I am becoming increasingly pissed off with the business side of it, it is all rather dull. I haven't done any graphics since SensiSoccer and Wizkid, apart from the odd icon."

As an example, Xenon (1987) was created by a team of three people (two programmers and one artist) with the audio subcontracted out. One of the Bitmap's more recent games 'Z' was created by four musicians, three designers, five programmers and five artists.

FOOT IN THE DOOR

So far this has assumed that you are ready and willing to take on the mantle of Project Manager – The Boss. Maybe you're not cut out for that. Maybe you just want a quiet life, coding/designing/composing/doodling away to someone else's brief. There's nothing wrong with that. If, for example, you are a genuinely good programmer, your skills are in demand. Jon:

"Good programmers have always been hard to find. There are a lot of bullshitters out there. Too many programmers are demo writers with illusions of grandure, or people out to make a fast buck by pulling the wool over peoples eyes on the back of their somewhat limited technical knowledge. Programming is about being good and having staying power and being able to work in a team and lots of other things, but most of all it is about seeing the big picture regarding the product. That is one of the main differences between a good and a bad programmer (I think)."



As for how to get into an established development team, Jon has a few pointers:

"You are better off getting a cracking demo together and going to an established team and having realistic expectations. Nothing happens overnight in software, but good talented, pleasant, hardworking, commited people are always valued in development teams. The market is not in a good state to set up on your own at the moment. Development costs are too expensive and the publishers are very cautious, they only want sure fire hits now."

Which makes the current state of the Amiga scene quite unique. While the stakes are very high on other platforms, the Amiga scene allows you to enter the fray at a number of levels. First of all there's the PD and shareware circuit, which can serve as a breeding ground for those who don't yet have the financial clout or all the skills and experience required to bang out a 24 carat classic. On the other hand, there's also the room to take risks with original game ideas that the major publishers would be too scared to take on. If you do hit the nail on the head with the next Tetris/ Worms/ Lemmings you can bet the big boys will beat a path to your door once it's been proven a success.

IT'S A WRAP

And that about wraps it up for now. Of you go now and make some top games. Make sure you don't miss next month's CU Amiga, in which we'll be following up with a guide to getting your software published. Oh, and remember to give us a name check when you're big and famous.

Tony Horgan

THANKS TO...

Big thanks go to Jon Hare at Sensible Software, Simon Knight at the Bitmap Brothers, Steve Hammond from Devil's Thumb Entertainment and Ed Collins of World Foundry (whose sketches and renders from the forthcoming Explorer 2260 adorn these pages) for their valuable help in the compilation of this feature.

Spam Spam Spam

Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam Spam.....



What does email have to do with Spam, the canned chopped pork and ham 'food stuff' that's been assaulting appetites since the forties?

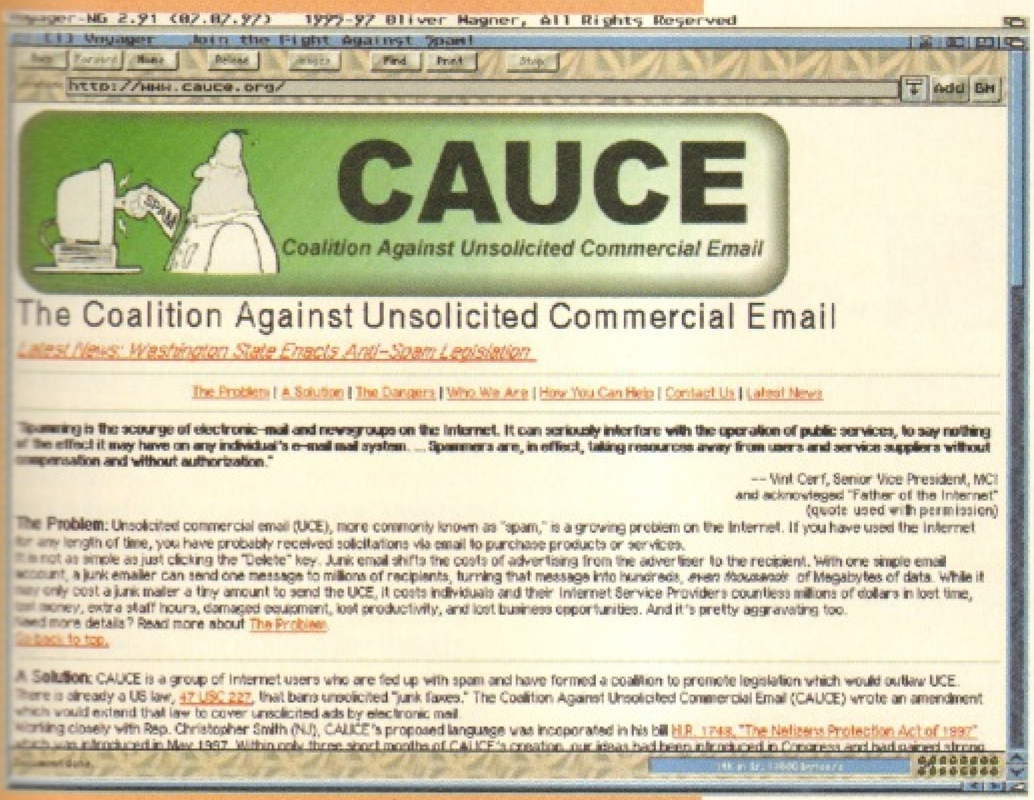
Junk mail has become a regular nuisance for all, from pizza menus to Tandy catalogues thrust through the letterbox each week. At least if someone has gone to the expense of printing and posting these leaflets to an albeit large but somewhat targeted audience, there's a slim chance that they may be of some interest to the recipient. However, now that the mass marketing machine has met the Internet, we face a new problem – electronic junk mail.

Only this time there's no print, no stamp and no limit to what can be advertised and how many copies they can send. The person which ends up paying is the poor Internet user in unwanted and unsolicited email advertisements.

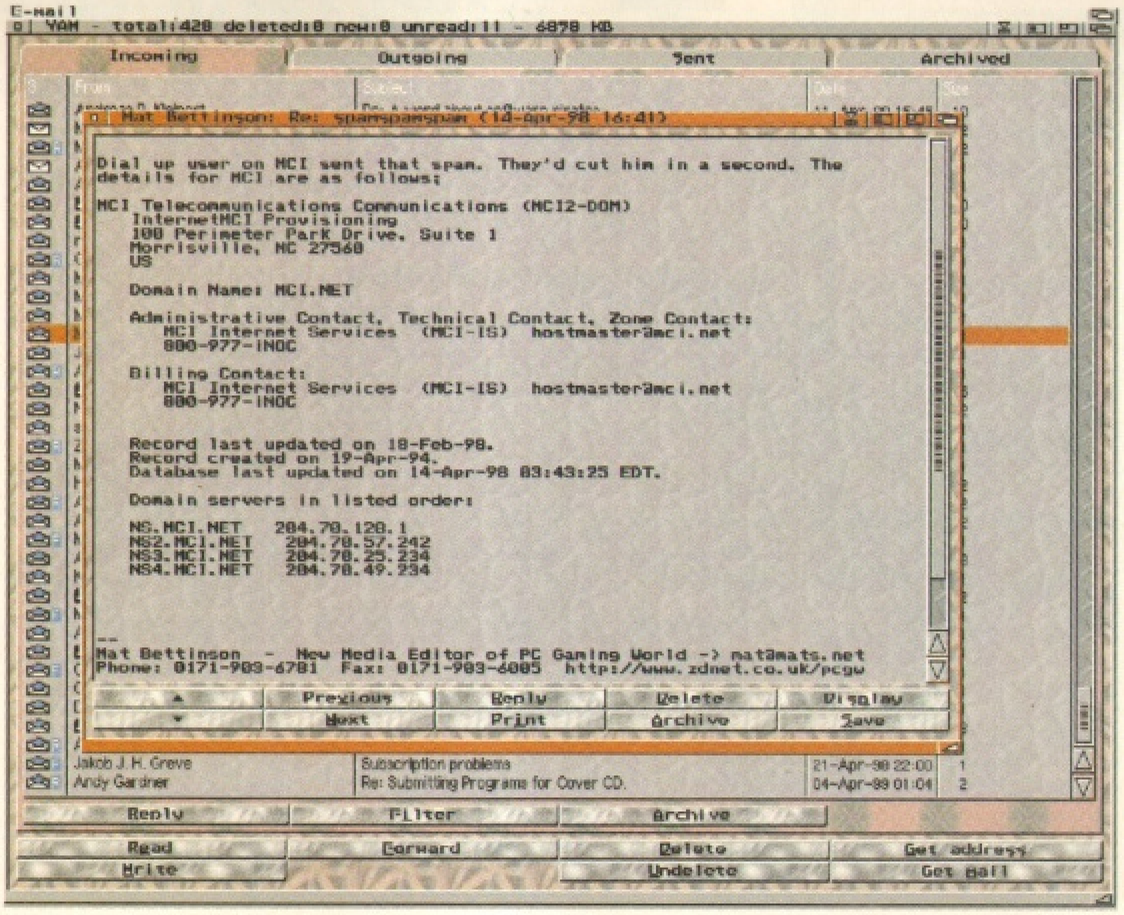
This is 'Spam': It seems to have got its name from a Monty Python sketch, in which Spam crops up on every item on a restaurant menu (you're bound to know someone who can recite it to you – Python sketch reciters are never hard to find). The point is, as in the Python sketch, email Spam seems to be everywhere, unavoidable, and unwelcome. But who are the 'Spammers' and what, if anything, can be done about them?

It doesn't sound serious, what's a few junk emails turning up in your inbound folder? In my case, a few is around a dozen a day, each full of the obligatory exclamation marks and get rich quick schemes. "Just call this number to find out how to email a million people just like this" or "Hi, I just thought I'd let you into this secret money making scheme I have".

One can either ignore it or one can get upset about it. If the latter, you can't just reply to the email since the reply address (and everything else) will be fake. The unfortunate thing is how easy it all is for the commercial Spammer to get away with.



▲ One of a number of websites set up as part of a campaign against the greatest bane of the on-line community – spam.



▲ They key to eliminating spam is finding out the spammer's real identities and asking their ISP to stop them.

Damn Spam!

All it takes is a program to sweep the Usenet newsgroup forums for email addresses and even automated web spiders which operate like search engines slowing reading every web site branching out forever. Only instead of acting as search engines, these malignant programs are designed to pick up email addresses instead. The would-be Spammer will run one of these programs for a few days and you have list of a million email addresses and more.

It's a simple matter to contact an Internet email host and send a million copies of the message – it doesn't even have to be sent a million times, the technology will duplicate it automatically. How this works is somewhat technical but the gist remains that it's totally free for a Spammer to write an email and tell a mail server to send it to a million people. It will then contact hundreds and thousands of other mail servers and pass on to them the message with a list of local addresses and so on down the chain until a 2K message turns into a couple of gigabytes of net traffic, all of which cost the Spammer spare change.

It might sound strange that the Internet mail system works like this but it has to for good reason – mailing lists, just like the CU Amiga list, are a legitimate use for sending out hundreds of copies of the same email. Spammers in effect run a mailing list too, only no-one asked to be on theirs. The trouble with the Internet is that being a global entity, it's impossible to police with any one set of laws. The practice could be outlawed in the UK but it's impossible to enforce if the perpetrator is in the United States – as is the case with 90% of Spam. In fact the United States complicates the issue with each state having separate laws and so on.

The problem of Spam has been around for some time and it's getting worse. Good news is that as the population of Netizens rise and the Internet becomes a mainstream medium, the problem of Spam is receiving attention from the American law makers. It just hasn't happened yet and "why?" is more complex issue than ignorance alone.



Meet Sanford

To potential advertisers, being able to say what they hell they like to a captive audience of millions of people, for the cost of only a few hundred dollars is too good to be true. It turns out that this is a very valuable service which creates a market for the commercial Spammer to make a living.

The most prolific, not to mention famous is Sanford Wallace's Cyberpromo. The antic of this man and his career in unsolicited commercial email verges on a legal soap opera. Wallace may have come up with a scheme for a quick buck, like most of his clients, but he didn't count on the backlash.

Out of the millions of recipients, a few percent were annoyed enough and possessed the technical ability to track down the sender and retaliate with a variety of nasty hacking antics. Needless to say, this was indicative of Wallace not being a very popular man.

Fighting Spam

There are things that can be done about Spam. These don't include trying to abuse the sender as this simply won't go anywhere, let alone to the recipient.

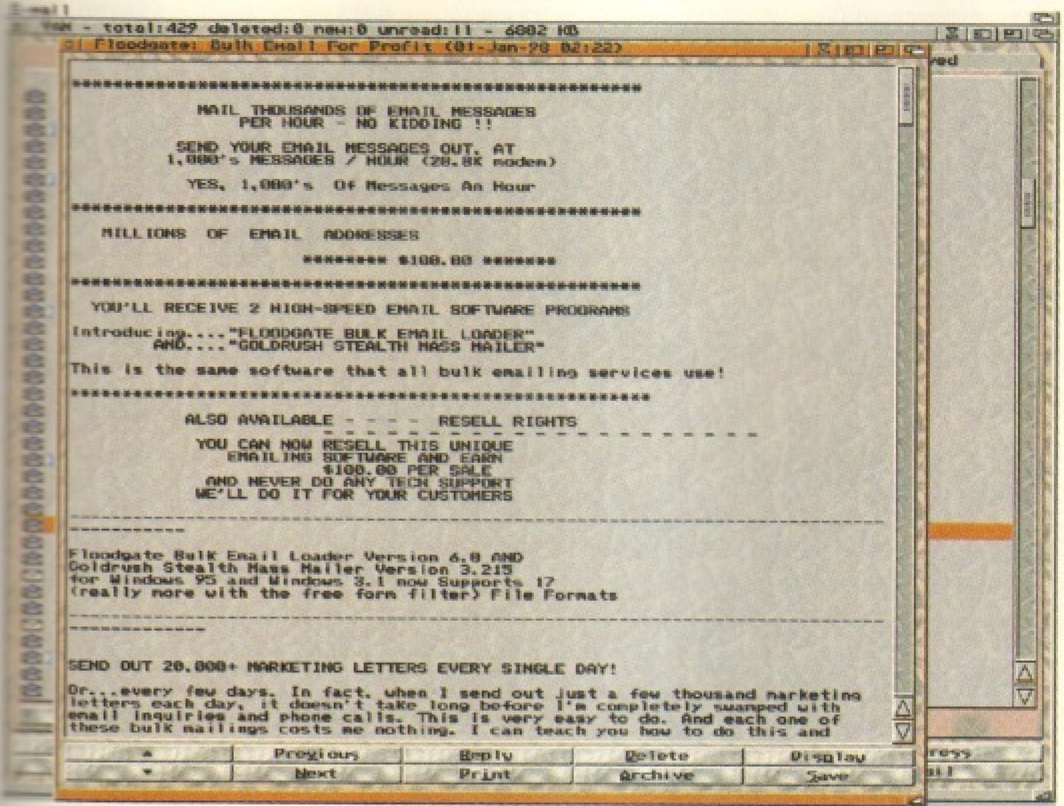
1 Don't give out your email address. That doesn't mean you don't tell you friends, it does mean that you don't fill it in on a web page or post a message to Usenet newsgroups with your real email address configured.

2 Try to find which Internet Provider was used to send the mail and then complain to it. This is somewhat technical and involves sifting through the highly jargon-laden 'header' of an email for the evidence. Alternatively ask your provider to track them down if you're not sure. Talk to the support at your Internet provider and they should be willing to help.

3 Don't ever ever EVER contemplate purchasing something from a Spam advertisement. By doing so you reward the practice and ensure it continues. Is a company using this technique likely to be reputable?

4 Filter the Spam. There are some plug-ins for email clients which will attempt to guess what messages are Spam. This isn't usually too difficult given the exclamation marks, 'FREE!' and 800 number mentions in each one. The email client will usually trash such messages, try http://www.aminet.org/aminetbin/find?Spam to see the Aminet anti-Spam programs that are available.

5 Tell your local MP about the problem. He/she may want to appear modern by taking the issue up and since it's a safe bet crowd pleaser, they'd be assured of a positive reaction. MPs like those kind of bills.



The worst type of Spam. A 30K mail received by CU asking us to buy spamming software. ▲

Wallace backlash

The backlash result was born by the Internet service provider that Wallace used to send the email. Since they were the subject of the aptly named 'denial of service' hack attacks and the bandwidth/mail problems caused by the millions of emails, Wallace became an unwelcome customer. In no time, the self-professed 'Spam king' found himself without a provider to send his emails.

He took to the courts, and lost. However, Wallace is one high-profile operator, but there's a myriad of backyard Spammers in business, as my inbound mail folder attests.

> **"Today I am introducing the 'Netizens Protection Act of 1997'. My legislation is aimed at protecting the internet user from the unseemly practices of the junk emailer. The internet user, or "Netizen," is in a vulnerable position in this new medium and we in Congress can not stand by idly as law-abiding citizens have their privacy invaded on an almost regular basis. And no one should have to pay for any such intrusion."**
>
> **- REP. CHRISTOPHER H. SMITH**

There's only one real way for the Spam issue to be tackled, or at least start to be tackled. That is if a law is passed in the United States to ban unsolicited commercial email. Once that is accomplished, offenders and advertisers alike can be held accountable there.

It's very likely than the rest of the first world would follow suit or at least have attention drawn to the problem from then on in. In the future, hopefully unsolicited email will become unacceptable in a range of countries and the authorities on this will seek action on those countries which do not subscribe to the Spam-free ethic. This could involve blocking bulk mail from those countries.

Problem USA

Ultimately a legal amendment in the United States is the way forward. A clear precedent has been set with the banning of unsolicited fax advertisements, once again on the grounds that it costs the public money to receive. Under such a system the so-called "Netizens Protection Act of 1997" bill otherwise known as the Smith bill seems to be the most acceptable and readily supported bill likely to be passed in the United States.

Sadly the Direct Marketing lobby also has some position of power and seeks toning down of the act such as not banning unsolicited mail outright but forcing 'advertise1ment' in the subject line or some such – unsurprisingly not solving most of our concerns at all.

The local situation in the United Kingdom doesn't appear to have been considered at all. Little wonder when virtually all of the Spam on the Internet originates in the United States. At it turns out, the infamous Cyberpromo did set up in the United Kingdom and chose to target just those Internet users within the '.co.uk' Internet domain. The reaction of die-hard British Internet users was extreme to the point that little has been heard of the venture since. I would suggest that if commercial Spam merchants did take up in the UK, there would be almost null resistance to a law banning the operation here where there are no Direct Marketing lobbies savvy enough to argue the case. Already the local Internet Providers have scrambled to configure their mail servers not to accept mass mails, this only prevents a Spammer from using their mailserver to do the hard work rather than protecting their customers.



Easy target Usenet

So far we've talked about email but the Spam term originally comes from Usenet news. Usenet is a term for a list of discussion groups on various subjects. Last time I checked something like 50,000 of them in fact. These 'newsgroups' are full of messages from interested parties around the world discussing the subject title. They are, unfortunately, an easy target for Spam.

As an illustration of how bad the problem can become, Usenet is the best example. Like email it's possible for a Spammer to post a message in a Usenet newsgroup such as comp.sys.amiga.misc and have the same message present in dozens to hundreds of other conferences with no cost to them. The participants in these news groups must thread between the advertising rubbish, usually selling pornography, to read the messages of the topic they wish to discuss.

Usenet is such a soft target that many conferences are nothing but Spam while legions of operators constantly send out 'cancel messages' to delete the Spam but, alas, they can never keep up. The problem is so great that recently the Usenet Spam-killers threatened to go on strike to illustrate their anguish.

The result will be that Usenet will drown in advertising junk which the administrators hope will draw attention to the problem. Time will tell if that has an effect. ■

Mat Bettinson

Essential anti-Spam web pages

http://Spam.abuse.net/ – Excellent anti-Spam site
http://www.cauce.org/ – Coalition Against Unsolicited Commercial email
http://kryten.eng.monash.edu.au/gSpam.html – Get that Spammer!
http://members.aol.com/emailfaq/emailfaq.html – The email abuse FAQ
http://math-www.uni-paderborn.de/~axel/BL/ – Blacklist of Internet advertisers

World of

We take a sneak preview at what is rapidly most exciting – and momentous –

The World of Amiga Show 98 will be taking place on the 16th and 17th May at the Novotel in Hammersmith, London. The WOA is the UK's premier Amiga event: everybody who is anybody in the Amiga world will be there – make sure you are, too.

As we all know, recent years have been a dark time for the Amiga, but this year's WOA show is set to be a bright and brilliant spectacle – a show fit to celebrate a new beginning. The new owners of Amiga, Amiga International, have top billing. They will be revealing their latest developments, particularly the progress made with OS3.5 – and are rumoured to have a very important announcement up their sleeves.

There have been revolutionary developments in the sphere of Amiga hardware of late. All the top manufacturers will be exhibiting at WOA '98, demonstrating their new Amiga gadgets and add – ons in action. If you want to see the eagerly-awaited BoXeR board or salivate over a PPC being put through its paces, this is the event for you.

The last few months have been an exciting time for Amiga games, too. WOA will see the lauch of some of the most exciting Amiga games releases in years, including Foundation, Genetic Species and Quake. Expect all that is new and good in Amiga games to be on show.

However, the WOA is not just an opportunity to view products – it is a chance to buy them as well. Many a bargain will be on offer at the show, from a myriad of suppliers and dealers, all displaying their Amiga wares. Huge savings can be made over the normal retail prices, so remember to take your wallet with you. If that wasn't enough, there are going to be prizes on offer too – several companies have expressed an interest in running competitions, and ClickBOOM and Haage and Partner are hoping to give out door prizes.

AmigaSoc UK are organising a series of seminars to be held over the weekend, with Kermit Woodall of Nova Design, Steve Jones of Siamese and Alain Penders of Finale developments all signed up to give talks, with more to come. There will also be a presentation stage in the show hall with a number of events including a live showing of the FA cup final on a huge screen.

Last but not least, the World of Amiga Show is a chance to meet and speak to your fellow Amigans: not only the people behind al that amazing Amiga hardware and software, but also the user groups, the magazines and journals, and all the steadfast members of the Amiga public like yourselves. Amiga users are well-known for their sense of community, so come to WOA '98 and share the experience.

There will be a number of user groups attending, and technical help will be offered. There may be a space available for user group tables, but that is not yet confirmed.

The Novotel in Hammersmith, the venue for WOA98, is only a five-minute walk from Hammersmith tube station, and so is easily accessible from the whole of London. Routes to main line stations for connections to the rest of the UK and to airports for the rest of the world are simple and straightforward.

As you can see, with all these marvellous sights to see and all these wonderful people to meet, the World of Amiga Show 98 is the event that any self-respecting Amigan must attend. CU Amiga Magazine will be there, and we expect all of you to be there, too. Don't miss out on the fun – see the World of Amiga advert on page 47 for the full details. If you have Internet access, keep tuned to: http://www.cu-amiga.co.uk/woa where all the latest information on the World of Amiga show will be available as and when when we get it. See you there!

Highlights of the show

It has been a long, long time since the UK saw a show like this. Whether you are into games or the more serious side of Amiga computing, this is shaping up to be the best Amiga show in years. Games players are going to see the likes of Quake, Napalm, Genetic Species, Golem, Foundation, Forgotten Forever, Haunted, and a surprise or two. ImageFX 3.0, Wordworth 7, Elastic Dreams, the latest Opus developments and Amiga Forever are the big players on the serious application front, but there are going to be some new products hoping to grab the headlines such as the new H&P wordprocessor EasyWriter and new browser Webcruiser. On the hardware front, we will see the first public presentation of the CyberstormPPC 3D graphics card, the InsideOut Amiga on a card, the BoXeR and the Ateo busboard/graphics card.

The Exhibitors

Although the line up of exhibitors is yet to be finalised, with a number of parties still in negotiation, the show is filling out nicely with exhibitors and interesting exhibits. Here is the list of confirmed exhibitors at time of press.

Active Software. Stand tba
Active Software are the Amiga comms experts. They will be debuting the long awaited Netconnect 2.0, featuring some important new developments for Amiga comms users. They will also have their highly rated ST FAX pro software and Pace modems.

Amiga Format. Stand 136
Our esteemed rivals.

Amiga Inc/Int. Stand 114
The guys behind it all. Both US and German divisions will be in London in force to answer your queries, talk about the future and give out posters. Petro will be introducing the new Amiga Theme music on CD, and there will be live performances and dancing girls!

Most importantly, Amiga Inc are expected to make an announcement of their business plans and the direction that the Amiga will take for the future. Expect a lot of excitement, controversy and lively debate!

Ateo Concepts. stand tba
Manufacturers of the excellent Ateo keyboard interface, and the Pixel64 graphics card/bus board for the A1200t. Also tower cases for the A1200 and A4000

Blittersoft. Stand 126
UK retailers and distributors of products including Micronik Towers, Picasso IV graphics cards and Fusion. Blittersoft will be presenting the new BoXeR Amiga compatible at World of Amiga for the first time.

ClickBOOM! Stand 139
Top Amiga games company. Will be hosted by...

CU Amiga Magazine. Stand 139
The world's best selling Amiga Magazine. We'll be there to answer your questions and discuss the latest developments. We'll have offers on the mag, and a lot to see - including ClickBOOM's latest games.
ClickBOOM will be on our stand and we will be jointly hosting a Quake tournament and showing some of their upcoming titles. Make sure you drop around, there will be something for everyone.

Digita International. Stand 112
Producers of Wordworth, the Amiga's leading WordProcessor.

Epic Marketing. Stand 116
Epic will be showing off the latest version of a range of products including Epic Encyclopedia '98, Virtual Karting 2, and "several other surprises". They will have the latest from the APC&TCP range, including Adventure Shop and Testament 2, and will be hosting Titan Computers.

Eyetech. Stand 152
Eyetech produce a wide range of products for the Amiga. They will be showing their tower, single slot Zorro, IDE CD-Writer, digital cameras and ScanQuix 4 scanning software. They have promised a range of "show specials".

Golden Image. Stand 108
Golden Image are a long standing supplier of Amiga goods including TV amazing and Catweasel.

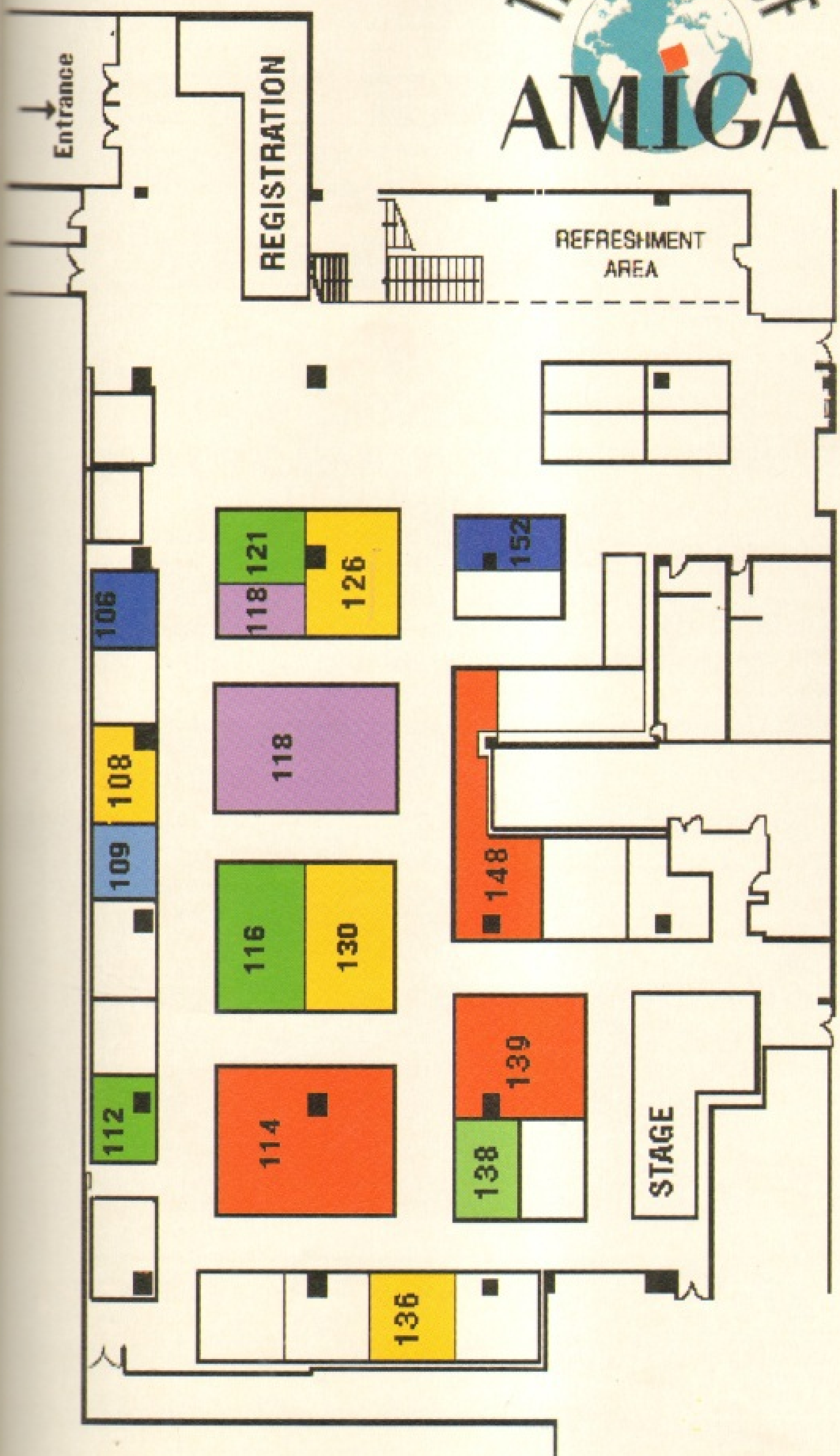
GP Software. Stand 148
GP Software are producers of the immensely impressive Opus Magellan, and will be displaying the latest version of this software.

Haage & Partner. Stand 114

f Amiga!

turning out to be quite probably the Amiga show in many year-

THE WORLD OF AMIGA



Top Amiga software company Haage & Partner will be on the Amiga International stand, demonstrating StormC and ArtEffect, and debuting their new Wordprocessor package Easywriter.

Hi Soft. Stand 121

Hi Soft are the company behind Soundprobe, Squirrel and Hi-Soft C, and will have their CD-RW system on sale.

ICPUG. Stand 106

The Independent Computer Products Users Group.

LH Publishing. Stand 112

Suppliers of manuals and books covering all aspects of Amiga DTP and UK distributors of Pagestream and Drawstudio. Will be hosting Digita International.

Nova Design. Stand 148

Nova Design are the company behind the stunning ImageFX 3.0, reviewed in this issue.

Olympus Digital Cameras. Stand 109

Olympus will be showing the latest in their range of award winning digital cameras.

Power Computing. Stand 118

Power Computing are the UKs largest Amiga supplier. Scan doublers, the Power digital camera, the amazing Golem and PowerMovie will all be on display alongside a huge range of towers, accelerators and other assorted add-ons.

Sadeness Software. Stadn 130

Sadeness will have the brilliant OnEscapee available, and are hoping to have a Foundation head to head set up to allow visitors to play their new game against the author. Foundation should be on sale at the show.

Siamese Systems. Stand 138

Siamese systems will be demonstrating their Siamese PC/Amiga system, and will be presenting the InsideOut Amiga on a PCI card to the public for the first time.

Titan Computer. Stand 116

German software company Titan Computer will be presenting new versions of their products on the Epic Marketing stand. BurnIT PPC, the first PPC CD-ROM writing software, Art Studio and Shadow of the Third Moon will be available. They are hoping to have demos of games Shadow of the Third Moon 2 PPC, Evil's Doom and Claws of the Demon too.

Weird Science. Stand 130

Weird Science will be selling a huge collection of Amiga CDs. They will have all the Aminet disks, Amiga Forever, the latest Schatztruh titles, and will be hosting games companies Sadeness Software and Vulcan.

White Knight. Stand tba

White Kinght are a leading provider of professional Amiga and video/graphics hardware. They will be showing the phase 5 PowerUp cards.

Wizard Developments. Stand 148

Wizard developments are a leading UK retailer. They will be hosting GP Software and Nova Design, whose products they distribute in the UK market.

Vulcan Software. Stand 130

Vulcan will be showing their latest projects on the Weird Science stand, including the impressive Genetic Species, which will be launched at the show. Watch for the robotic face hugger!

Bubbling under:

Several companies are negotiating for stands at the moment. Alive Media software hope to be there with the latest demos of haunted and Gilbert Goodmate, and phase 5 will be present in some form – although currently demands on staff may limit this to Wolf Dietrich and Gerald Carda promoting their products on the stands of their various distributors. Versalia computers should be presented on the Amiga International stand, and several other companies are currently in discussion.

Screen Scene

It's here! The legendary Quake is finally out. We give it a thorough seeing too – and then turn it upside down with the Quake total conversion game Malice. If that wasn't enough, there is a re-release of Myst's older brother, and a look at what's hot this spring.



Malice



Quake



Napalm

Spring Fever

There have been times in the Amiga's past when we could expect to see more games being released over the spring than you could list on this page. I'm not sure there's ever been a spring they've looked this good. Feast your eyes on some of the beauties due to be on show at World of Amiga.

Napalm

A posting on ClickBOOM's website on April 13th caused an uproar on the Internet. It announced that the ClickBOOM development team was no more, but said they would be "...back one day, in some better, more peaceful future." The next page said "We hope you were prepared for The News. You must have heard all the warnings, and like us, thought it would all somehow resolve itself." Click the next link, and large red type informs you "The War has started!" followed by an exhortation to "Follow us as we assemble the heaviest artillery forces to blow the enemy away!". Yes, it was just ClickBOOM showing us that Canadians can be wacky too, with a bit of publicity – nicely worked in with the breaking story on the CNN news pages about the train load of ageing napalm being shuttled back and forth across the states – for their new game Napalm – the Crimson Crisis.

Ablaze Entertainment, previously responsible for the rather unimpressive Strangers AGA, released a demo of Diversia about six months ago and threw Amiga games publishers into a frenzy as they competed to sign the game up. ClickBOOM won the bidding, and with their input Napalm is the result. A classic top down real time strategy game in the Command and Conquer mould, Napalm is set in the future with a host of buildings and units to choose from and awesome graphics. We were amazed when we saw the original demo – we're really looking forwards to seeing what six months more work has done.

Further Details:
www.clickboom.com

Genetic Species

We've got a press preview of this game, and it's certainly looking like the promise will be fulfilled. It looks like a Doom clone, but plays more Paradroid or Gauntlet. The graphics are a real tour de force – compared to many modern 3D engines it is primitive, but the quality of the textures and the amazing lighting effects more than make up for it. If you thought that shooting barrels in Doom and watching a chain reaction of nearby barrels blowing up was fun, just wait until you see what GS has to offer. Find a room full of fuel tanks, hit one, and watch a huge, billowing wall of flame spread through the room, and if you aren't careful, engulf you.,
Genetic Species has a great range of weapons, monsters and locations to keep up your interest, and it is clear that a lot of thought has been put into the design of all three. It's engrossing, gorgeous, and if early indications are anything to go by, a lot of



Genetic Species

fun. We are hoping to have the full version for review in the next issue – keep your eyes peeled, this one looks like a winner.

Further details:
www.vulcan.co.uk. orders: Weird Science +44 (0)116 246 3800

Golem

Underground Software's extremely tasty looking Golem has been snapped up by Power Computing, who are making something of a habit of publishing Amiga games written by Italian developers. The release schedule is a bit less clear than the other titles on this page, but a demo should be on show at World of Amiga, and a release date shouldn't be too far behind.

Golem is an extraordinary game. Based on a custom animation format said to be significantly more powerful than industry standards such as AVI or MPEG, Golem creates a narrative by spooling some stunning rendered animation from CD. The obvious worry for a game like this is that it will end up being no more than the bastard child of Lightwave and Dragon's Lair, the ancient laser disk arcade game.

Golem is basically an adventure game, but one in which your character explores a 3D world under joystick control. There is no way that even a PPC machine with a top of the range 3D graphics card could actually generate 3D imagery of this detail this fast, so it is all pre-rendered and played according to what you do with the joystick. When this has been attempted in the past the usual result is a game which looks great but plays like one of those old choose your own path adventure books. The demo we played was rather limited in scope, but actually managed to achieve an illusion of real time control. If the game play manages to appear as smooth throughout, Golem is going to be a game that could make the entire games industry sit up and take notice.

Further details:
Power Computing, website www.powerc.com or phone 01234 851500

Foundation

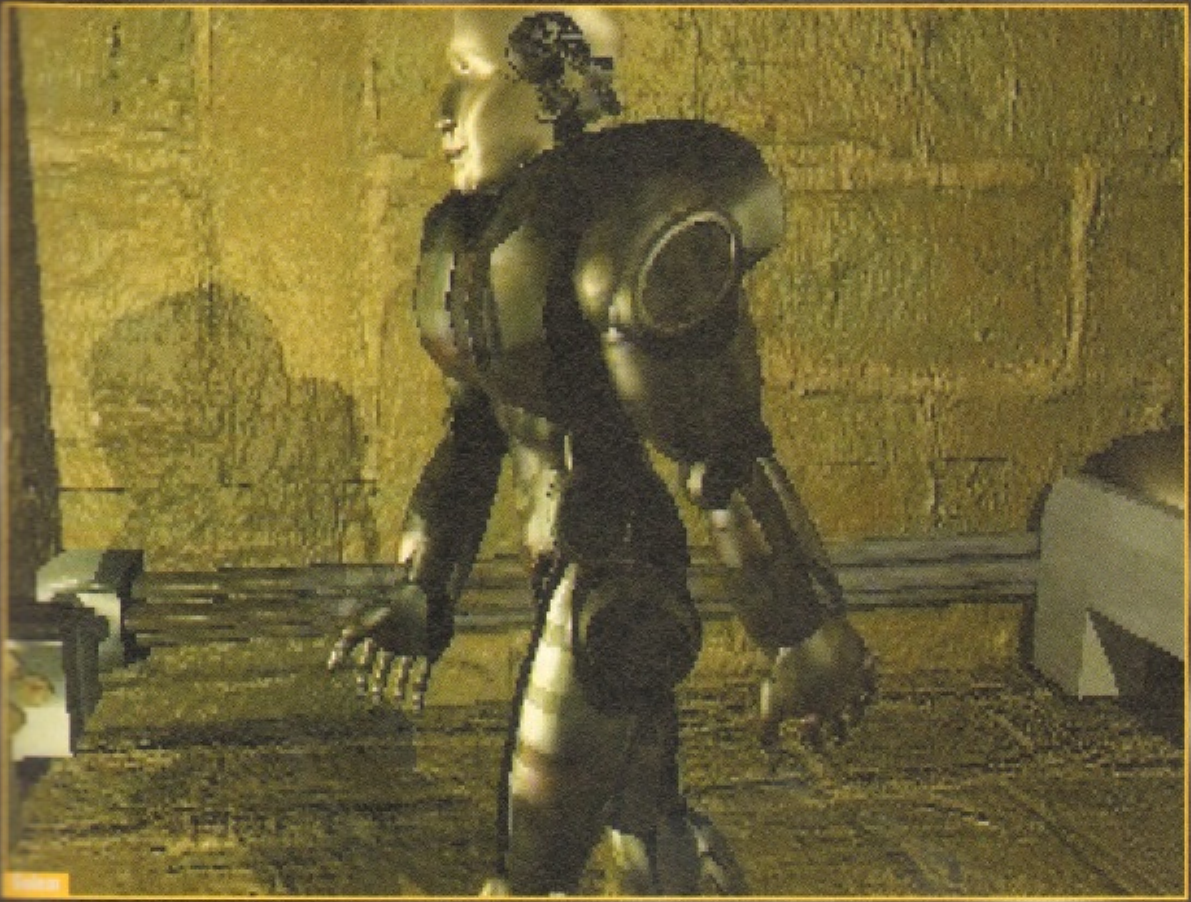
What can I say about this one? An epic strategy/war game that has been in development for about 3 years now. When a demo appeared on the Aminet a few months ago, author Paul Burkey was so engulfed with questions, queries and ideas that he's been working overtime to fit in everything he wants – impressively, the demo is now up to version 8.

Full of resource management as well as all out war, this one is more like settlers than Command and Conquer, so don't expect this to be a head to head with Napalm. The features list is impressive, and the scope enormous. Graphically detailed but designed to work in a wide range of resolutions, this in one game that should look good on all but the most basic set ups. All this and starring around 1000 Amiga users who sent in mugshots of themselves, too!

Foundation should be at WOA in a complete – or very near to – form. Sadeness are hoping to have a networked setup to allow all comers the chance to challenge Paul at his own game. However that will not be the end of it, as upgrade patches (including full TCP/IP support for internet play) and extra mission packs will be made available. This one looks like the kind of game that ought to come with a health warning – buy this and you'll get far too little sleep.


Foundation

Further Details:
www.sadeness.demon.co.uk orders: Sadeness on +44 (0)1263 722169 or Weird Science +44 (0)116 246 3800.


Golem


Napalm

Quake

■ Price: £29.99 ■Original Developer: ID Software ■ Amiga Developer: ClickBOOM ■ Web: http://www.clickboom.com

The most talked about Amiga game in years is here, and the impossible made possible. Welcome to Amiga Quake.



Some people upgrade their computers to get better Internet access. Some people upgrade for improved graphics handling, others to make codec algorithms run faster. None of the above reasons are nearly as common amongst PC owners than upgrading to get a better Quake frame rate. If Amiga owners follow suit there are going to be some pretty happy hardware manufacturers out there over the next few months, because a lot of Amiga owners are going to have to upgrade to get the most out of Amiga Quake. The happy news is of course that it is worth it.



Quake, for those who have not been paying attention to the world of computer games in the last 18 months, is a first person perspective blaster along the lines of Doom, but set in a true 3D world in which you can look and aim at any angle. There is a story, of sorts, about a bad guy and slipgates, but it is best ignored. The basic premise is that you are a mercenary sent hopping through the dimensions to fight assorted demons and monsters, hunting the four runes that you need to defeat the big boss of badness.

Welcome to Hell

Visiting an assortment of futuristic bases and sword and sorcery style wizard's towers, you roam around killing everything that moves, switching switches to open up various parts of the complexes and travelling by lift, floating platform, or teleport gate.

There are various liquids to swim in, such as toxic effluents and water, and lava which melts you rather quickly. There are also plenty of pick-ups: weapons, armour and health, and a few specials, such as the biosuit which allows you damage-free dips in the toxic waste, a pentagram of protection which makes you temporarily immune from harm, and the Quad Damage, which makes you deadlier than a bucket of anthrax.

You progress through four zones, each with one of the four pentagrams at the end. Each zone consists of a half dozen or so different levels, each one a little tougher than the last. Finishing each mostly involves killing a bunch of monsters, but there's a bit of puzzle solving too, in the shape of switches that need to be switched and traps that need negotiating.

You can rush headlong through a level avoiding quite a lot of the action if you know the way, or you can take things more slowly, making sure you kill all the monsters and find all the secret areas.



▲ Stand well back – these guys burst!

Quake is one of those games that benefit from prior knowledge of a level. You can save a lot of trouble if you bounce grenades around corners you know are hiding badguys, but there is just enough flexibility in the game to allow levels to be completed without knowing all the tricks. Having said that Quake is not an easy game, so be prepared to ease yourself in, and save your game regularly.



◄ Disturbing a fiend at rest is strongly inadvisable – unless you have a lightning gun of course.

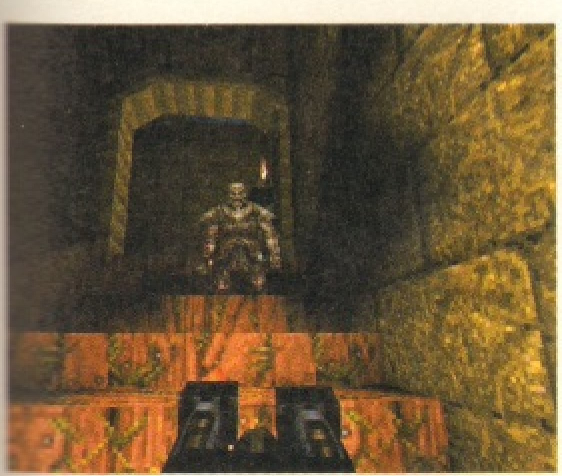
Make friends – and frag them.

It has been suggested that Quake doesn't have the gameplay of Doom, which is not true. Quake is a better and richer game without doubt, but it is also a game which seems to outlive its own content. People liked Quake so much that they played out the levels and wanted more. Luckily Quake has a couple of tricks up its sleeve.

The first of these is the multiplayer options. Two computers via serial connection or modem, or more via IPX or TCP/IP networks, can share a game of Quake allowing multiple players in the same game. Normally this takes the form of a deathmatch game, in which the participants rush around special deathmatch levels looking for weapons and blasting each other as often as possible. To aid interactivity Quake supports messages, and each player can have an individual name and clothing colour. There are possibilities



▲ RAAAAR!



▲ "Er... that's not fair, I've only got a sword."

for team deathmatches and variants such as capture the flag games. Networking is clean and simple – and yes, you can network versions of Quake running on different platforms. Internet play is also an option, but you are likely to run into practical difficulties at the moment. Latency problems will make you vulnerable to players using Quakeworld, the Internet optimiser, on the PC, but fortunately Amiga Quakeworld is due soon – watch this space.

Total Conversions

The other trick up Quake's sleeve is its programmability. Quake includes a powerful programming language called QuakeC, which allows fairly radical modifications to the game. Because the language is portable, QuakeC add ons written for the PC version work fine on the Amiga too, making literally hundreds of Quake add ons immediately available.

These add ons can be as simple as extra weapons, or as complex as entire new games. A popular type are "bots", autonomous pseudo players. Using these it is possible to play capture the flag as a single player game, or spice up your deathmatch with the addition of a "borgbot" which assimilates anyone it kills, animating their victim's corpse as another borgbot until the level is packed with the buggers.



▲ Quake chess total conversion



▲ AirQuake total conversion



▲ Painkeep total conversion

What about PPC?

To get the obvious question out of the way, no, the PPC version does not come in the box. It's a real shame, because even the cheapest PPC card would make Quake a lot faster. ClickBOOM have told us that they hope to have a PPC version soon, but will be concentrating on 68K developments until they can be more sure of the long term commercial value of PPC. Until then, the long promised PPC Myst is being given priority.

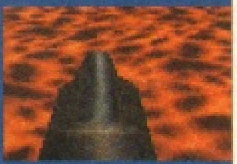
Choose your weapons

Weapons in Quake are varied in form, power and usefulness. Know thine enemies, but if you don't know your weapons, you're dead meat.

Axe:
Weapon of choice for the bloodthirsty but suicidal. Effective against rottweilers and grunts, if you don't mind taking a few licks into the bargain. Try one against a Shambler - but only if you yearn for the grave.



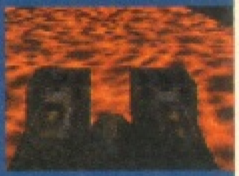
Shotgun:
Basic holdout weapon. Takes a few shots to drop most enemies, but ammo is plentiful. Better than an axe - but look for something else, fast!



Double-barrelled Shotgun:
As above, but doubled firepower drops foes fast. Great for taking out weaker monsters in a single blast, safe in close quarters and easy to find ammo for.



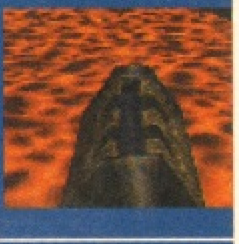
Nail Gun:
Now we're cooking! Fires a stream of nine inch nails certain to rip the flesh off a monster in less time than it takes to crack an egg. Watch for the guys in armour, though.



Super Nail Gun:
The ultimate in hard ammunition weaponry, a cross between the nailgun and Doom's mini gun. It turns grunts into ratatouille, opens up a knight like a can of spam, even makes a fiend think twice.



Grenade Launcher:
Lobs a cannister of hi-ex. Great for crowd control. Use this to send a few grenades into a room before you enter. Great for laying down covering fire, attacking enemies on other sides of walls and blowing Zombies into frustrated giblets.



Rocket Launcher:
Like a grenade launcher but the projectile is rocket assisted. Fantastic long range destructive potential, send 'em to hell before they even scent your sweat on the wind. Not to be used at close range. You aren't a great Quake player until you've mastered the art of Rocket Jumping.



Lightning Gun:
This baby launches a stream of high voltage plasma in a sparking ark of pure death. Totals weaker enemies with the merest touch, fries fiends in a flash, even makes a Shambler ask for its mummy. Hit the button, use like a hose and spray it over a room full of foes. Yeah!



Rogue's Gallery

"He who fights with monsters, should take care, lest he thereby become a monster. And when you gaze too long into an abyss, the abyss gazes also into you". So wrote Friedrich Wilhelm Nietzsche in Beyond Good and Evil, but judging by the amount of time I've spent hunting monsters in Quake without growing claws and spouting yellow froth from my ears, I reckon he was talking rubbish. "He who seeks monsters best know what they are up against," say I.

Grunt:



He's the guy with the big gun you meet right at the start. Dumb, weak, and that gun isn't as deadly as it looks.

Rottweiler:
Killer canines with teeth a shark would be proud of. They ain't no pussy cats but they won't give you too much grief. Just get out your shotgun and blow the sucker away - it's the only merciful thing to do.

Ogre:



Looks a bit like Giant Haystacks on a bad day. Fat as the EU butter mountain, but mean as a student grant. If the chainsaw isn't bad enough, the sack of grenades makes things worse. Here's a guy it isn't fun to face at short or long range.

Knight:
OK, so they may look a bit tough, but get real. He's a medieval nutter in a tin suit with a sharpened metal stick, while you're a lean, mean killing machine with high tech weaponry at your disposal. Blow him back to the middle ages.

Enforcer:
A Grunt with a bit more grunt. Watch for the guys with the bigger guns - but don't treat them with too much respect.

Zombie:



These guys have just climbed out of the grave and their plan is to drag you back in with them. Shoot them and they just get up for more. You can't kill them, so use explosives to turn them into harmless bite - size chunks.

Scrag:



Spooky ghost - things. Not as tough as they look, just give 'em both barrels.

Rotfish:
A hazard to swimming. Keep your eyes peeled and blast them before they take a bite. More annoying than anything else.

Fiend:
The name says it all - these guys are nasty. They'll leap on you and rip you into spaghetti if you give them half a chance, and it takes quite a lot to kill them. Use your toughest weapon.

Vole:
Spider demons with a mean line in heat seeking fireballs. Kill these guys quick, dodging their blasts is not easy.

Shambler:



Be afraid. Be very afraid. Huge, powerful, capable of pummelling you into the dust or blasting you to atoms with their lightning bolts. Don't use rockets on these guys, they'll shrug them off - super nail gun or lighting gun is your only hope.

Quake speeds



You can expect up to 10fps in full screen on an '060/50 with AGA, 5 on an '040/33 and 2 on an '030/50. 5 is bearable, 10 is great. Graphics cards add only around 15% as most of the work is calculating the polygons, not displaying them – the best thing about graphics cards is getting the lovely 16 bit modes.
To speed up, shrink the screen to 80% and select 1x2 pixels. Type `d_mipcap 2` and `d_mipscale 2` at the console and then try – you may end up playing with a screen as above but you can add a lot to your frame rate. Look for a guide to getting the most from Quake next month.

Most spectacular are the total conversions, which turn Quake into a totally new game. Some, such as Painkeep, are basically Quake clones, while others, such as AirQuake, offer a quite different gaming experience.

There are about three dozen of these I know of, varying from pretty uninteresting amateur efforts to commercial releases such as the awesome Malice, reviewed right after this. When you buy Quake, you're not just getting one game, you're getting dozens.

Get Quaking!

The arrival of Quake is a real bonus for the Amiga. It is the most technically advanced game the platform has ever seen, and it has an enormous amount to offer the player. Some people will complain that the system requirements are too high, but on the highest spec machine available – Zorro 3 graphics card and 66 MHz '060 – it runs very nicely, and that is the power that PC owners had to upgrade from, not to, to play Quake.

Quake is a jaw dropping game. It is utterly engrossing and enormous in extent, thanks in large part to the range of add ons. Quake totally dominated the PC games world from the day it was released to the day Quake 2 was released, and it deserved to. Nintendo 64 and Playstation owners are howling for this game, but we've got it first, and we also have the internet and QuakeC facilities the console versions can't touch. Quake is the king of games – buy it. ■

Andrew Korn

Quake

Processor	020 & FPU min	Graphics	96%
Disk format:	CD only	Sound	87%
RAM	8Mb	Lastability	98%
Hard disk installation	??Mb	Playability	93%

OVERALL
The ultimate in atmospheric shoot 'em up action.

95%

Malice

■ Price £14.99 ■ Developer: Quantum Axcess
■ Available from: Weird Science © 0116 246 3800



▲ Napalm action courtesy of one of Malice's excellent weapons.

You know about Quake, you know about Genetic Species, but did you know about Malice? Read on and all will be revealed.

AMIGA MAGAZINE SUPERSTAR

One of the best things about Quake is that it is highly programmable. As you probably know, you can load in new weapons, new monsters and new levels. Some developers have gone a stage further and produced "total conversions", add on packs so in depth that they represent an entirely new game. Widely considered the best of these is Malice.

Installing Malice to the Amiga is very simple, despite being originally intended for the PC. Just drag the Malice drawer from the CD to your Quake directory. The malice.bat file which fires up Malice on a MSDOS/windows machine will work as a launch script in AmigaDOS if you delete the winmem command. Weird Science should be able to supply an installer script.

Meet the B.O.S.S

In Malice, you play a mercenary in a cyberpunk future, working for the B.O.S.S crime syndicate in their war against the shady Takahiro industries. There is a mission narrative outlined to you in rather gorgeous 3D cut scenes which provide a lot of atmosphere, and foreshadow the twist at the end of the narrative.

Playing Malice is very much like playing Quake, just with rather more to do. There are plenty of switches as usual, but they do rather more, and you even get to move crates around and climb on them, Tomb Raider fashion. Exploration is made more varied by the introduction of "toyz" – see the boxout.

Combat has a lot more tactical depth than is usual in this sort of game. You might find yourself being shot at by an unseen assailant – take cover and look around for the SWAT soldier hanging above you on a rope, or the distant sniper hiding in the shadows, his position only given away by the muzzle flash of his gun. Even face to face, combat requires a little more thought. The weaponry is varied, and picking the right gun at the right time makes a lot of difference. Usually with this sort of game you end up using just your most powerful couple of weapons, but not in Malice. Sneak up to a room full of baddies, drop a napalm mortar in – and watch the ones who escaped the blast be set alight by their burning companions. Single targets at long range are ideal Uzi fodder, while a group in the distance is what the minigun was made for. The fact that some weapons require hitting a reload key can lead to embarrassment if you don't pay attention. Further complexity is added by the range of enemies – face a Banshee Mech and be prepared to spend most of the fight dodging that lethal stomp, while getting in close on a Torcher means you'll likely end up on fire, necessitating a quick dash to the nearest fire extinguisher.

Doom Raider?

Graphically Malice is brilliant, the Quake engine being used to dramatic effect in some huge and unusual sets. There is even "chase cam" mode, in which you see your character from outside in pure Tomb Raider fashion. A small bug in the Amiga Quake code causes the main character's trousers to flash psychedelically in the shadows in some screenmodes, but Clickboom know about this and expect to have a fix patch at some point – something ID Software do a lot for PC Quake. There are of course all the same issues of speed that Quake has – you will need a meaty Amiga – but Malice has pretty fast levels. Sounds are pretty much as per Quake but with a few atmospheric extras – odd rattling noises, heavy breathing, and your main character saying "I wanna hit something" in true Duke Nuke'em fashion.

Malice rocks. Malice has brilliant deathmatches and superb single player action too, a strong answer to those who thought single player Quake was a little dull. Malice is one of the best games out anywhere, and thanks to Clickboom's Quake, it's an Amiga game as well. ■

Andrew Korn.



▲ Get too near this guy and they'll send you home in an ashtray.

Toyz

One of the best features of Malice are the toyz. These pick-ups add a hell of a lot to the game. There is a probe, which can be sent flying ahead of you to scout out the terrain, scuba gear for long underwater swims, a hover board, mini subs and parachutes.

Using these in the right places is not only essential for winning the game, but enormous fun. Dropping from a great height by parachute can be the perfect opportunity for some surprise strafing, while running around in the mini-makes for very funny death matches, as the subs can outrun their opponent's (and rather dangerously, their own) torpedoes. It's the hover board that will quickly be installed as most people's favourite though. Not only can you skim across any surface, but the turbo boost allows you to fly into all sorts of unlikely places, and fly out of the way of oncoming fire. Rocket jumping? Who needs it?

Malice (requires Quake)

■ Processor	See Quake	Graphics	97%
■ Disk Format:	CD	Sound	82%
■ RAM:	16Mb	Lastability	88%
■ Hard disk installation	80Mb	Playability	95%

OVERALL

Utterly brilliant, worth buying Quake for alone

95%

The Labyrinth of time

■ **Price: £24.99** ■ **Developer: Electronic Arts**
■ **Available from: Alive Mediasoft ✆ 01623 467579**

Back in the days when when Myst was just a mere dewdrop, there was...



▲ Daedalus wants a word.

Turn the clock back five years. People were just starting to appreciate what the CD-ROM could mean for computer gaming. Those users who could afford the hundreds upon hundreds it cost to get outfitted with drives, and those companies who could afford the thousands upon thousands it cost to produce CDs, were trying to figure out how to keep each other happy. And then there was the CD32, Commodore's little machine that could have lasted if it had been given a real chance. Such was the day of the Labyrinth of Time.

Now, those prices have dropped a whole order of magnitude, and The Labyrinth is back. In a way, this game belongs more to 1998 than to 1993. Back then, being able to exploit the CD by relying on loads data-hungry pictures and music was new, and made The Labyrinth a novelty. Now, of course, in the post-Myst era, it's old hat. There's more than a passing similarity between the two games, which makes it somewhat fitting that the first should be re-released just as Myst fever is starting to wane.

Getting Lost

You're a nameless, tedious, bored workaday fellow leading a dreary life. (Well, that's what the game says about you, anyway.) That is, until you step into the subway car to be faced not by 300 other people but by Daedalus, architect of the Labyrinth of legend.

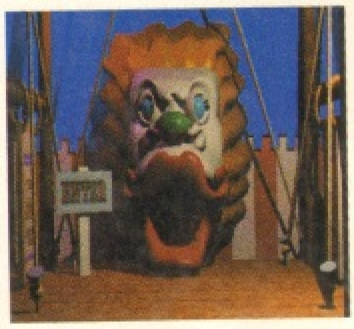
It seems that Daedalus has been commissioned by Minos of the underworld to build a new labyrinth, of tremendous power and great eclectic taste. Daedalus has no choice but to obey, but out of guilt contacts the first mortal he can find – you – and relates his story, indicating that Minos must be stopped. Daedalus takes you into the labyrinth. So, you find yourself on a deserted train car perched on a platform in the middle of nowhere. One of the doors leads out to a quaint turn of the century hotel, and so the story begins.

You have a few basic abilities in the world of The Labyrinth. You move about via arrow keys – turning left and right and moving forward. You are able to pick up objects, move them, examine them more closely (often necessary, but often just for decoration), and use an item in your inventory on something in the labyrinth. You also have an automapper, which comes in very handy when you start wondering where to go next.

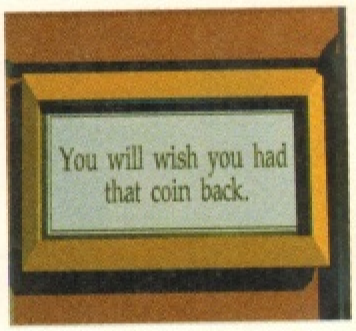
Clearly, you're going to need to solve some puzzles. The game is decent about giving you some indication of what to expect – you start out with a coin, so of course you might want to find a slot to put it in. A certain brick wall generates the unusual "You might want to open it first" message usually reserved for doors if you bump into it.

The down side of the puzzles is that it's not all that easy to figure out what's relevant. There are plenty of objects you can zoom in on which don't serve any particular purpose towards the solution of the game – they just look nice. That, and it's easy to fall into a "click everywhere" trap, trying to get a reaction out of the game when you give up on logic. The game's one-line status bar doesn't make it easier – there are lots of sarcastic retorts for actions which seem reasonable even if we have to keep in mind that not every possibility can be coded into a game of this scope.

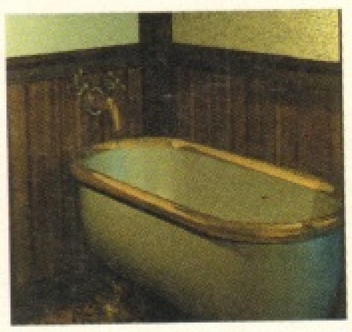
The music is generally good, often orchestral, but occasionally gets very annoying – usually when you can't figure out where the next puzzle is and you're getting quite frustrated. The sound effects and animations (usually for opening doors and activating gadgets) add a nice touch to what is essentially a very static game.



▲ Step inside the belly of the beast



▲ This was funny, I figured you might enjoy it.



▲ The Labyrinth is good, clean fun.



▲ My other home is Superman's ice castle.

The graphics are the real draw of The Labyrinth. This game is very possibly the best use of HAM-6 ever made. While the game lacks the cinematography of Myst and usually relies on dead-on views (closeups excepted), the various crazy locales in the Labyrinth are rendered (literally) in very attractive fashion. Some might be jaded by Myst's sweeping horizons, but I still found a few shots in The Labyrinth extremely impressive, almost breathtaking. And the standard cardinal directions and automapper make this an easier game to navigate than Myst.

Unfortunately, HAM comes at a speed price – even on an 060 with a fast CD-ROM, there's a slight pause when switching views. The speed penalty isn't usually troubling, but when you start spinning around in rooms trying to examine lots of objects, you start to notice it.

The Labyrinth did more with the CD-ROM than many before and many since. The game is engaging, if not thoroughly engrossing. There are design flaws, you'll need to disable AGA to run the game properly, and it doesn't have the same global legion of support that Myst enjoys. A slideshow, then? Well, maybe. But a slideshow with some puzzles to keep you paying attention, nonetheless. ■

Jason Compton

The Labyrinth of Time

■ Processor	68020	Graphics	88%
■ Disk format:	CD-ROM	Sound	85%
■ RAM	2Mb	Lastability	60%
■ HD Installable	N/A	Playability	65%

OVERALL
Some design flaws, but an engaging game nonetheless.

78%

Tips Central

Who said cheats never prosper... certainly not CU Amiga. This month our arcade expertise comes courtesy of Chris Green, and Sjur Mathisen supplies your regular fix of adventure tips.

Elite

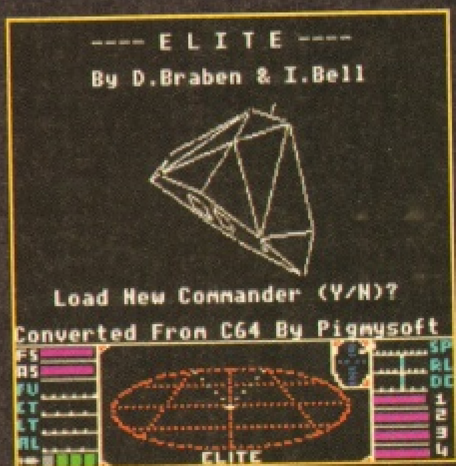
Byte No.	Change to	Effect
12	00 to FF	New Galaxy
13	00 to FF	New Galaxy
18	FF	Lots of credits
1F	46	7 light years of fuel
23	02	Large cargo bay
24	01	ECM System
26	01	Pulse Laser
2C	01	Escape pod
2F	01	Energy bomb
32	01	Docking computer
34	03	Galactic Hyperdrive
36	01	Mining laser
38	01	Military laser
3C	01	ECM jammer (L key toggles on/off)
3F	01	Cloaking device

Cargo pokes		
40	01	Lots of extra food
47	01	Lots of textiles
49	01	Lots of radioactives
4C	01	Lots of slaves
50	01	Lots of wine
54	01	Lots of narcotics
5C	01	Lots of computers
63	01	Lots of machinery
67	01	Lots of alloys
69	01	Lots of firearms
6C	01	Lots of furs
72	01	Lots of minerals
75	01	Lots of gold
79	01	Lots of platinum
83	01	Lots of gemstones
84	01	Lots of alien artifacts
88	01	Refugees from Supernova
8C	01	Important Thargoid doc
Criminal record and rating pokes		
97	01	Clean legal status
97	00 & 02-08	Elite ranking

Revered by some as one of the greatest games of all time, Elite is also one of the most complex. Thankfully there are an absolute stack of cheats built into it!

To activate the cheat mode; type in the word SARA (or SUZANNE if you have a later version) when the game asks you for a word from the manual. When it asks you again for a word, enter the right word from the manual.

During play, pressing the HELP key will bring up the built-in Hex editor used for the original game testing. By changing the byte codes to the ones listed here, you can poke and cheat your way to success:





Doom

Here are a few more cheats for use with our DOOM coverdisks. They also work with Doom 2 and Final Doom:

IDCHOPPERS = Gives you the chainsaw
IDMAN = Skip level
NOMONSTERS = Hey, guess what – no monsters!
IDTALL = Makes you taller and stronger!
IDWEAP = Gives you a secret gun!
IDMYPOS = Displays coordinates and heading
IDMUS = (Map #) – Plays Music from Selected Level

During multiplayer games, go into map mode, type ALT and IDDT several times and you will see your opponent's map marker move.

TFX and Pinball Fantasies

TFX – When in flight press SHIFT+D to get full ammunition, rockets and aluminium strips, which should keep you in fighting form for a bit longer if you're having trouble.

Pinball Fantasies – Type in the following code during gameplay: CHEAT – Get intro of cheat EARTHQUAKE – Stop table tilt EXTRABALLS – Adds seven balls FAIR PLAY – Disables the above cheats

Adventure Helpline

Hook

How can I get some pirate clothes?

Alan H, Netherlands

Have you asked your mother if she can make a costume for you? If she won't try the following:

Behind the pirate square, get the line pole and the anchor. Go to dead mans pier and grab the rope and use it with the anchor. Enter Bait and Tackle and go up to the open door. Now use the anchor with rope three times on the top of the croc to get to the other side.

You should get a hat now if you have good timing. If not, just keep on going back and forth until you get lucky. Next go behind pirate square and use the pole on the blue jacket. To get the last piece of clothing go to Jolly Roger. Get Fake Jake as drunk as possible and take his pants.

Indiana Jones – Fate of Atlantis

On the wits path I found the truck in the desert and I have a spark plug, but where is the battery? On the team path I am in Crete and I've used the surveyors transit with the bull's head and bull's tail but what was the point? Nothing happened!

Also , on the fists path I am in the desert and every time I go down the ladder I get shot at when I try to come back up. What do I do? Please help quickly!

Katie Scott, Twickenham

Hello Katie. See you've got your mind set on completing this game one way or another, and I don't blame you because it's great! It reminds me of one time I was stuck at a dig site in the desert with a truck, but no battery.

The problem was that I had to get to Monte Carlo to save the world. What I did was to use a clay jar and a hose I found in a pit, to grab some gas from the trucks gas tank. Then I returned to the pit and filled a generator with the gas and turned it on. Light! Now that I could see what I was doing I picked up a 'rib of a ship' and used it to tear down a crumped wall.

Next I pushed a painting, picked up a statue, found some orichalcum and used it with the statue. Now I just called for a mechanic and had him install the spark plug in the engine of the truck, and used the statue as a battery. The world was safe, once again. Did you find the story interesting? YES? Well, let me tell you another one then. I was off to save the world, and had to drop by Crete to pick up a moonstone.

The only problem was that I had no idea where it was hidden. I ran back and forth into different entrances, and in one of them I found what I was looking for. I found a mural diagram with a bull's head, horns and tail.

This told me to put the surveyor's instrument on the head statue and look through it to the left horn. Then to put it on the tail statue and look at the right horn. This gave me an X. I grabbed the ship rib I found some other time I saved the world and made a hole in the ground. That's how I found the moonstone. Hmmm.... Did I mention how I took care of a huge nazi with a machine gun at the dig site? NO? I just nailed him with my whip before I beat him up. I could sit here and tell stories all day Katie, but I promised some other folks I'd help them with their problems too, take care!

Monkey Island 1

I'm stuck on Part 3. How can I get the banana picker out of the cannibals hut? I must give the cannibals an offer for the great Monkey, what can I give them? I give the monkey five bananas, and now he's following me what can I do with him?

Alan H, Netherlands

You really want to be a pirate, don't you Alan? Both Hook and MI together! Go to the gigantic monkey head at the clearing of the east end of the island. Make sure the monkey is following you. Pull the nose of the totem pole. Now you'll get past the fence and should find a wimpy little idol. Trade it for the banana picker.

Indiana Jones and the Last Crusade

In the catacombs under the church I can't get past the bars to the knights tomb. Please help.

Ben Moore, Leicester

I must admit I don't remember where in the catacombs you are, but I know you'll never get through those bars. What you do is take a longer, more complicated route.

I'll just give one of those boring straight to the point guides to help you there. Walk until you find a room with two skeletons on the east wall. Get the hook. Continue east past the room with the torch and keep going until you get to the sewer room with a manhole cover. Return to the surface. Take the wine on one of the tables and return to the sewer. Walk to the board filled with water and fill the wine bottle. Return to the torch and use the water to loosen it. Pull the torch and enjoy the ride.

After that perfect landing go east past the screen with a cork and some dripping water. Write down the inscription. Back to the cork. Use hook in cork. Whip the hook. Go back up to the screen where you filled the bottle. Take the door to the right. Use red cordon to fix the machine. Use the wheel on the right to turn it on. Explore the area until you find a room with three gold statues near a door. Check the Grail Diary and push the statues until they stand in the correct order. Go through the door. Find a narrow stone bridge and cross it. Go into the tunnel, walk round some more until you end up in a room with some skulls on a table. Check the Grail Diary to find the correct order to push the skulls.



Monkey Island

We start off this month with the latest version of one of the Amiga's true killer apps - ImageFX 3.0. Plenty more to keep the image conscious happy with scandoublers, a very cheap digital camera and a rather tasty genlock.

TechScene

ImageFX 3.0

■ **Price: See panel overleaf** ■ **Developer: Nova Design**
■ **Supplier: Wizard Developments © 0181 303 1800**
http://www.novadesign.com

Living proof that Amiga software development is alive and kicking the opposition into touch, ImageFX is back with more power than ever before.

AMIGA SUPERSTAR

A new version of one of the Amiga's flagship applications is always something to get excited about. ImageFX has long been a favourite with everyone from the occasional dabbler to the professionals. It's an image processor with built-in/bolt-on morphing and animation processing features, and an impressive array of special effects and compositing tools. Even so, nothing is ever perfect, and v2.6 still left plenty of room for improvement.

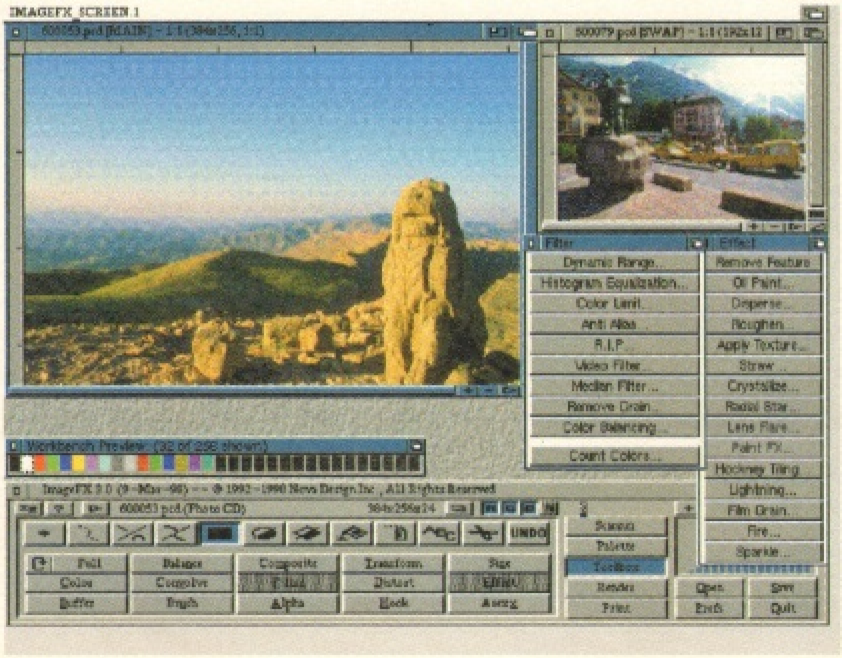
The most obvious change since the last release is the more standardised window-based interface. While the original split screen approach is still available (now refered to as the "Classic" edition), many will welcome the new system which bends the original interface to fit in with more familiar working methods. In this mode, the layout of the main control panel is virtually identical to that of older versions, except this time it's drawn using a conventional window and buttons. Images (or buffers) are now loaded into their own resizable windows on the same screen, allowing for multiple images to be viewed simultaneously. The front end hasn't been totally transformed (for example, there are still no pull-down menus) but a good balance has been struck between the old and the new.

This new interface features the floating "child" menus – secondary tool bars you can drag and position anywhere on the screen and leave open all the time while you work, and multiple simultaneous image windows, which you can stack, tile, resize or drag around as you please.

While you could run this part of the system on a true colour 24-bit display, speed and memory overheads will be more manageable if you make do with a lower colour depth and resolution here. To see the results of your work you can then render any image to a new display. Typically, on an Amiga with no graphics card, you might use a 64 colour Hi-Res PAL screen or flicker-fixed interlace for the main working (preview) environment and a Productivity HAM-8 display to view your pictures at each stage of processing. Of course, if you have a graphics card you could use just a single screen.

What's in the box?

If you've never owned ImageFX and buy the whole package outright, you'll get the same disks, the same upgrade manual, plus the monstrous main manual, an inch-thick paper-



◄ **Here's the new interface running on a 640x400 DoublePAL screen in 256 colours. A graphics card display would be preferable and much faster. You can still render your images to alternative displays regardless of that used for the main interface.**



▲ Here's an example of how just a few ImageFX processes can be put to good use. First of all a new sky was rendered with the new Clouds function. This was then switched with the original blue sky with a single mouse click from the CineMatte feature. Finally a couple of lightning bolts were rendered for good measure.

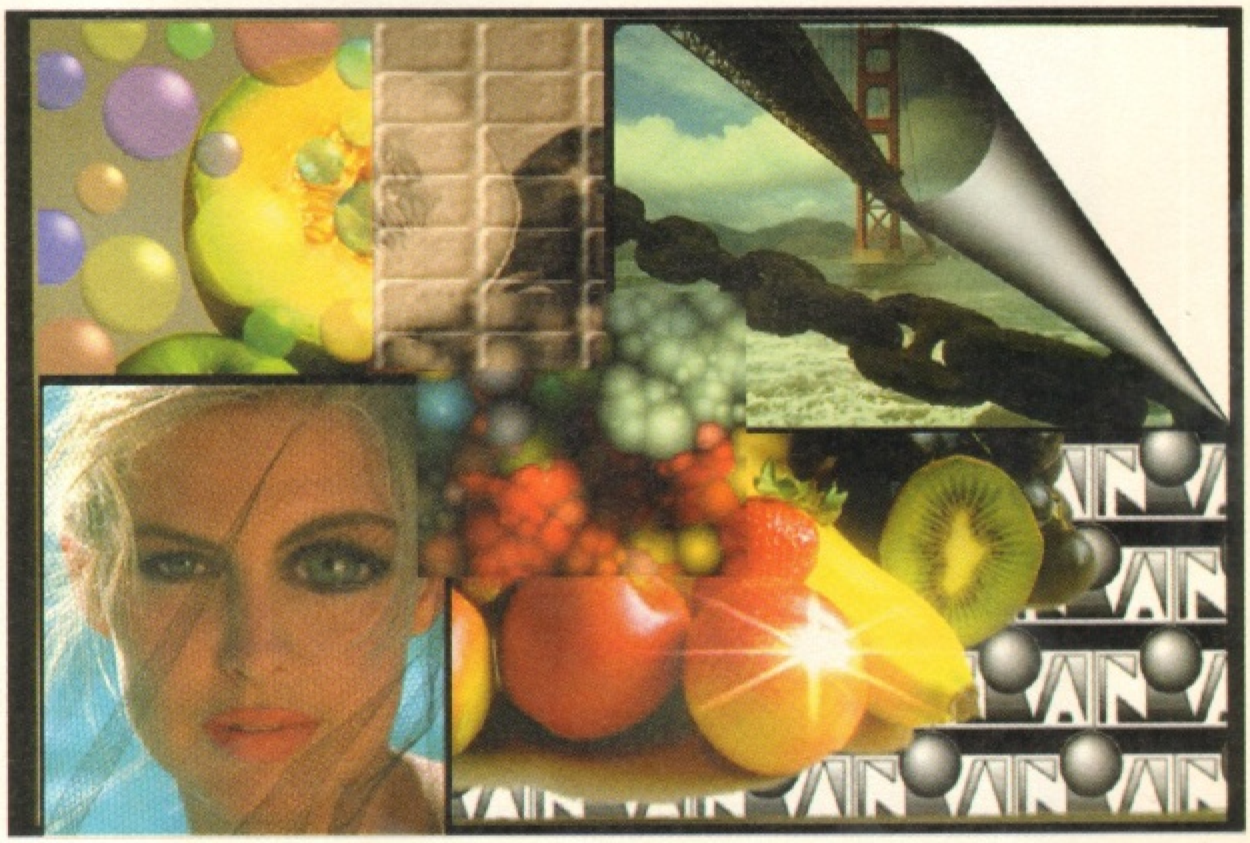
back book, hundreds of pages long, and profusely illustrated. It's one of the most impressive Amiga product manuals I have ever seen.

You also get the option of installing quite a few "extras" – these are public domain add-ons and plug-ins which Nova Design neither supports nor guarantees, and they include MPEG utilities, a PostScript loader, PAR-PEG loader, Photo CDROM loader, and others. Depending on your needs, you may want none, some or all of these.

Strangely enough, despite the preponderance of GIF images on the Web, ImageFX 3.0 does not include any GIF loader or saver. This, they explain, is due to restrictive Unisys licensing fees for the compression formulas used in that format.

However, you'll probably want to get loader/saver modules to handle GIF, and you can easily download one from any of the popular Amiga file sources out there and from Nova's own FTP site at ftp.novadesign.com.

See how many different processes you can spot in this one. ▶



Good new bits

Windowed interface
The new style interface comes with with floating "child" menus that can stay open after initial selections have been made. The older "Classic" interface is still there too. The new interface can open on the Workbench or on custom public screens. This works on stock Amigas but really shines when used on high resolution graphics cards.

Multiple image windows
Multiple images can be opened and worked on at once on the same screen. You can even have multiple working views of the same image.

Layers
This is a feature borrowed from the mighty Photoshop. Working with 'layers' allows realtime compositing of a near-infinite series of images in a single window. You can adjust compositing methods on the fly, and reposition elements. Layers images can be saved in a new IFF/INGF format or in the Photoshop layered format.

Loaders & savers
Many new loaders and savers are built in, including native Photoshop format.

Improved previews
The effects preview windows have been vastly improved, with multiple sizes, zooming, and panning.

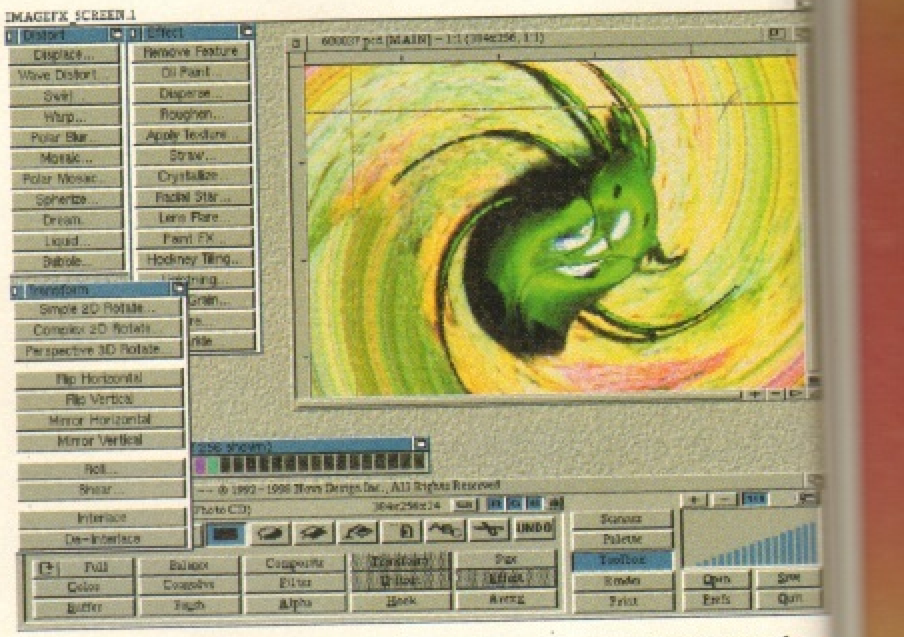
CPU optimisation
The program has been re-optimized for each processor in the MC68000 family, including 060s.

New effects
These include fractal clouds, scatter/shattering, a ray-tracing, bump-mapping water effect called Splash which can simulate raindrops, surf, even jelly, and a new page curling effect. All of these can be animated over time.

FX Forge
This is an extremely flexible "hook" or plug-in which uses maths expressions to manipulate images in an infinite number of interesting ways.

Despite the best efforts of those pushing the PNG format as a replacement for GIF, that simply hasn't happened and the vast majority of web graphics you'll come across are either GIF or JPEG.

A complete install of the whole six disk suite will eat about 10Mb of hard drive space. This isn't bad, considering everything this package contains.



Now you can leave out as many menus as there's room for. ▲

Neatly ironed out creases

This latest revision of ImageFX has done a lot to iron out previous creases whilst making real progress in the features department. Sensibly Nova Design have not been shy of taking ideas from other image processing systems, most notably Adobe Photoshop in this case. Photoshop is widely regarded as the best desktop image processor you can buy, but it's only available for Mac and PC.

Most experienced Photoshop users would be lost without its system of 'layers', such is the power and flexibility it offers. ImageFX makes a passable first attempt at ripping this off, and why not? The system works by allowing you to stack any number of images on top of one another, with each image contributing in some way to an overall image (Photogenics uses a very similar system). This allows the user to quickly and easily experiment with different compositing ideas.

Each component image can simply be faded to a specific level, or you can select from a range of modes such as Add, Subtract, Darken, Lighten and so on.

Hidden away in the Hooks drawer is another good new feature: FX Forge. This is an incredibly versatile effects plug in that comes with dozens of pre-configured settings. The results possible from FX Forge include a page curl effect, motion blur, fractal image rendering, abstract distoritions, zooms, whirls... You can also tweak the sliders of any of these to get new variations, or even formulate your own from scratch (the latter is certainly not a task for the mathematically challenged!).

The upgrade's manual also lists half a dozen web sites where you can find thousands of other FXForge/Filter Factory effects to download, use, or modify.

Effects

We're spoilt for choice now when it comes to effects processes. Old favourites like fire and lightning are joined by page curl, radar, Picasso and many others. Most of these come courtesy of the new FX Forge hook, a plug-in which comes with a string of pre-defined parameter settings and is also capable of loading in loads more. Here's just a small selection of them.





▲ FX Forge adds a whole new range of effects and is capable of taking plug-ins or having new ones written for it.

There are lots of other little improvements too. For example, the preferences requester sports some interesting new choices. Lots of user complaints about the too-small effects preview windows resulted in important enhancements: the preview windows now open in your choice of three different sizes, and you can zoom them in and out, and even grab a preview picture and pan/slide it around, depending on what part of your main image you want to see an effect happen on, before you choose to apply it to the whole image.

These new features make the preview windows more of a useful tool instead of just something to squint at.

PowerPC support is absent from the main 3.0 release, but will be available soon in the form of plug-ins. Considering the time involved in processing large 24-bit images, it's a perfect candidate for PowerPC conversion.



Conclusion

ImageFX is one of the few Amiga applications that's used professionally in the 'big wide world'. Apart from the reasons listed so far, one factor is its ARexx interface, which makes it possible to perform all kinds of batch image processing tasks which would otherwise drive a human operator mad. For example, NASA uses it to download and process images from its space probes.

ImageFX 3.0 is a monumental piece of work, and really a marvellous upgrade to an already impressive product. It can be approached on many levels, and will be useful for any Amiga owner who wants to create and manipulate computer imagery either just for fun, or for professional pursuits. This product is a true bargain, more so when you compare it to the price of similar products on other computer platforms. ■

Harv Laser

Prices and upgrades

£179.99 (new) £79.99 (from 2.6)
£99.99 (from 2.1) £129.99 (from 1.5)
Include first original disk with order

Cycle gadget tip

In ImageFX 2.6 and earlier, you could double click on a cycle gadget and a pop up menu would appear with all its choices. This is very useful, especially on a cycle gadget with lots of choices. Due to popular request this feature has been replaced with standard cycle gadgets that work with Amiga Commodities such as CycleToMenu.

However, if you have the ClassAct GUI system installed on your Amiga, you can bring the pop-up menus back again. Simply add a new tooltype to your ImageFX 3.0 icon that reads exactly like this:

CYCLE_GADGET=CLASSACT

IMAGEFX 3.0
DEVELOPER: Nova Design Inc

System Requirements: Workbench 2.1+, 10MB hard drive space, 4MB RAM. Recommended: 68060/PPC, plenty RAM, graphics card

Ease of use 93%
Useful for beginners to graphics professionals. Interface is mostly logical and intuitive.

Performance 95%
Very rich feature set, little is missing. Good 3rd party support. Performance varies with CPU model.

Value for money 95%
Initial buy-in a bit pricey but upgrade pack is a bargain.

OVERALL
The best image processor goes from strength to strength
95%



POWER UP
http://www.Phase5.de
phase 5
LIGHT MY FIRE.
CyberStorm PPC
180MHz, 200MHz & 233MHz PPC
with 060/50MHz or 040/25MHz
All with Ultra-Wide SCSI-3 Onboard
Upgrade Models without 040 or 060 available
CYBERSTORM PPC
POWER UP
AMIGA™ GOES POWER PC™
Blizzard 603e Power Board
160MHz, 200MHz & 240MHz PPC
with 060/50MHz or 040/25MHz
Designed for use with A1200 Tower Systems
603e+ Model Has Onboard Fast SCSI-2
"The essential upgrade for all A1200 users"
"A superb blend of value and power"
"Not to be missed."
"A real bargain."
94%
CU Amiga
BLIZZARD
603e+ POWER BOARD
phase 5
DIGITAL PRODUCTS
COOLER
Warning: Do not operate without cooler!
Caution: Hot!
Upgrades Available From Blizzard 1240T, 1260 & accelerators
with socketed 040 or 060 CPU's. Please call for details & prices.
CYBERVISION PPC
& Blizzard Vision PPC
graphics cards due shortly
WHITE KNIGHT TECHNOLOGY
The UK's Largest Supplier Of Power PC Accelerators
Tel : 01920 822 321 Fax : 01920 822 302
Email : White_Knight_Tech@CompuServe.Com
P.O. Box 38, Ware, Herts., SG11 1TX, U.K.
phase 5
DIGITAL PRODUCTS
For Pricing Information, See Our Main Advertisement In This Issue

TurboPrint 6

■ Price: £39.99 ■ Developer: IrseeSoft ■ Supplier: Wizard ✆ +44 (0)181 303 1800

Printing your fave pictures? Publishing your own magazine? This could be just the program you've been looking for.

It's a familiar story these days: hardware manufacturers continue to innovate with better, cheaper, faster products, then release them with software for PCs and Macs, totally ignoring Amiga users. Last month's focus on digital cameras showed what can be achieved when Amiga people get on and do it themselves. It's a similar situation when it comes to printers.

This time it's TurboPrint that comes to the rescue, but unlike the current digital camera drivers which are still fairly basic affairs, TurboPrint is an incredibly well developed printer driver. In fact, to call it a printer driver is doing it quite a disservice.

TurboPrint 6 comes into its own when used with the new generation of photo realistic printers. The standard Workbench printer driver system only allows for output with a maximum of 4096 colours. This means that even if a custom Workbench printer Prefs driver was written for these new printers, they would still be unable to get the best out of the latest high resolution ink jet printers.

TurboPrint gets around the problem by ditching the Workbench printing system in favour of its own replacement for the standard 'printer.device'. This is then combined with specially written drivers for all the latest printers, and the results are stunning.

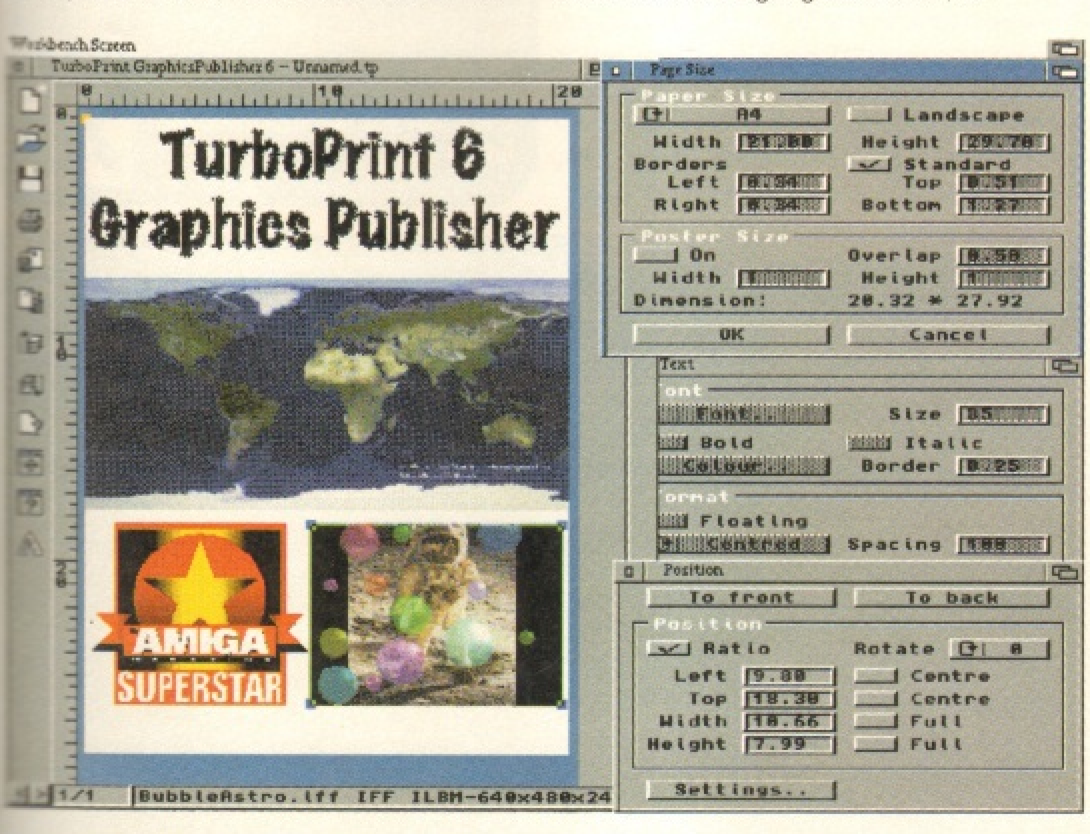
Glittering Prize

The star of the show is a section of the TurboPrint system called Graphics Publisher. This lets you to set up a page of standard or custom dimensions onto which any number of images can be arranged prior to printing.

You can also enter text onto the page (either typed directly into a text box or imported from a file). This alone makes it possible to output any picture to your posh new printer in 24 bit colour. On a basic level, you could just load a picture, postition and scale it to fit the page and then hit Print. More advanced applications include the output of thumbnail collections, contact sheets, or even full blown flyers and brochures designed and laid out with nothing more than the Graphics Publisher.

Anyone who has worked with large images will be aware of just how much memory they can use. If you want to output a picture with no visible pixelisation you need a very high-res image (monitors tend to blur pixels far more than hard copy printouts). However, this doesn't mean you need acres of RAM to get good results, as TurboPrint comes with its own background printing system which uses the hard drive as temporary storage space – a kind of custom virtual memory system.

Moving with the times, TurboPrint now makes use of a PowerPC processor should you have one. Printing high resolution images can take quite a while, so this is a welcome addition.



▲ The 'Graphics Publisher' lets you to output any picture to your printer in 24 bit colour.

New for version 6

- Turbo Spool – Prints in the background direct from your hard drive
- Text function – You can now enter text into the Graphics Publisher
- Photo Optimiser – Optional automatic colour balance correction
- PowerPC support – Drastically speeds up printing times for PowerUp'ed machines
- New printer drivers – See text file "TurboPrinters.txt" on disk & CD for details
- Improved UCR – Finer control over UCR (multicolour black) output

Conclusion

There's no debate. If you have a new high quality printer, you must have TurboPrint. To buy a printer on the level of the Epson Stylus Photo and not use TurboPrint to drive it would be madness.

Whether you just want to print out your favourite pictures, make giant wall posters or publish your own slick magazines and newsletters, TurboPrint is an essential purchase. ■

Tony Horgan

TURBOPRINT 6

System Requirements: Workbench 2 or higher & printer **Recommended:** PowerPC, hard drive graphics card

Ease of use 95%
Basic configuration is simple but there are reams of optional tweaks on offer.

Performance 94%
Output as good as your printer will allow, and these day's that's pretty good!

Value for money 89%
Cheaper than the last update with more features. You can't say fairer than that.

OVERALL
An essential companion to any modern printer. **93%**

TV-Amazing

■ **Price: £89.00** ■ **Developer: Grand** ■ **Supplier: Golden Image Ltd** ✆+44(0)181 900 9291

It lets you watch TV and your Amiga's display on a VGA monitor, but is the TV-Amazing really grand?

The TV-Amazing may have a silly name, but it is a clever box of tricks. Basically, it is an audio/video switching unit with a VGA pass-through and a TV-tuner built-in. What this means is that with this device you can display and switch between, all on the one VGA monitor, your computer's video output, domestic television and two other video sources.

Installation

The TV-Amazing is a modem-shaped box with various audio/video connectors, status LEDs and push buttons. It comes with a remote control, power supply and the necessary cables. It has connectors for two video inputs (one composite, one S-VHS), VGA in and out (to connect up to your computer's RGB port and to your VGA monitor), three stereo audio inputs (one for each video source), RF input (for the TV aerial), and composite video and audio output.

In use

Once everything is connected up, the TV-Amazing is easy to use and works invisibly as far as your Amiga is concerned. It has essentially four modes of operation – PC, Video1, Video2 and TV – which may be cycled through by pressing a button on the unit itself or on the handset.

In PC mode the RGB signal from your computer is passed through the device to your VGA monitor. No signal is produced at the composite video output. This is the default mode of the device while your computer is switched on.



In the Video modes a video signal is passed through from either the composite or S-VHS inputs to the video output. This signal is also scan-doubled and sent to the VGA monitor.

TV mode works similarly to Video except the signal comes from decoding the RF signal. In this mode the device is operated like a normal TV. It has an auto-scan facility to automatically tune in to different channels and the usual channel selection, volume, contrast, etc. controls. It is also compatible with cable TV.

However there is a flaw – at least as far as the Amiga is concerned. The TV-Amazing was designed for PC use, and, since PCs already produce a 31KHz RGB video signal, the VGA input to the TV-Amazing is not scan-doubled. This means you cannot display PAL or NTSC screenmodes with this device via the RGB cable. You must connect the Amiga's composite video output to the TV-Amazing's composite video input to able to display these modes. Unfortunately, the picture quality that the TV-Amazing produces for composite video on a VGA monitor is of too poor a quality for computer use. A standard video monitor like the 1084S generates vastly superior picture quality.

Conclusion

The Grand TV-Amazing is an ingenious device, but it is not an all-in-one solution for the Amiga. Because it does not scan-double 15KHz screenmodes via RGB and because of the poor quality of the composite display, its use with these modes is limited. It will appeal to people that have restricted space and want to be able to display everything on one monitor, or to those who only own a VGA monitor. ■

Richard Drummond

TV-AMAZING

System Requirements:
Any Amiga

Ease of use 90%
If you can operate a TV, you can use this.

Performance 65%
Let down by poor quality composite video display.

Value for money 90%
Good, but not ideally suited for Amiga use.

OVERALL
Good, but not ideally suited for Amiga use. **75%**

Why do you need a scan doubler?

A standard Amiga has versatile video display capabilities and supports many different screenmodes. The problem is finding a high quality monitor at the right price which will display as many of these modes as possible.

There are three types of RGB monitor that will work with an Amiga.

Video monitors

This is the most commonly used type of monitor and has a horizontal scan rate of 15KHz. Monitors that fall into this category include the Commodore 1084S, the Philips CM8833-II and the humble TV set.

Pros: will display PAL and NTSC screenmodes, the default and most commonly used modes on the Amiga; compatible with video equipment, e.g., VCRs, genlocks; inexpensive.

Cons: maximum display size of 640x256 and poor definition, hence unsuitable for text display.

VGA monitors

This type of monitor is used with just about every PC and has a standard horizontal scan rate of 31KHz. They can be connected to an Amiga with a 23to15pin VGA converter (available for about £15), but the problem with these types of monitor is that generally they will not work with standard Amiga screen modes. However, there is a monitor driver supplied with Workbench called VGAOnly that "tweaks" some of the other drivers to work with VGA monitors. With this, for example, the Multiscan and Euro72 productivity modes get increased horizontal frequencies of 31KHz, high enough to work with any VGA monitor.

Pros: cheap, high quality monitors readily available; rock solid, high resolution display; compatible with graphics cards.

Cons: will not work with a lot of Amiga software: e.g. the early startup screen, bootup errors, alerts and most games require a 15KHz screenmode.

Micronik Scan Doublers

■ **Price: £64.95 (A1200 Internal) £74.95 (Any Amiga external)**
■ **Developer: Micronik** ■ **Supplier: Blittersoft ✆+44(0)1908 261466**

They are officially endorsed by Amiga International, but are Micronik's new scan doublers worthy of that prestigious Boing Ball?



These scan doublers from Micronik are attempted solutions to the problem of connecting a decent monitor to your Amiga. There are three versions: an internal A1200 version which fits onto the A1200's motherboard; an external version which plugs into the RGB port of any Amiga; and a version on a ZorroII card (which is not reviewed here) to fit a Zorro video slot.

Installation

The A1200 internal version of the scan doubler consists of three small pieces of circuit board which clip onto three of the chips on the A1200's motherboard.

This is fine if you already have an exposed motherboard, say, in a towered A1200, but otherwise it is a hassle. You must take the case apart and remove the floppy drive and the electrical shield before installing it. The main piece of this scan doubler fits underneath the internal hard drive if you have one. It is a tight fit. You will be lucky to get the shield back on, especially if you have a bigger 3.5" drive.

The external version, however, is simplicity itself to fit. It consists of a three-inch-long oblong box with a 23pin video plug on one end – which connects to your Amiga's RGB port – and a 15pin VGA plug on the other – which connects to your monitor. You cannot go wrong.

In use

Both these scan doublers operate transparently to your Amiga. There is no software to install. The net result is that you can display PAL and NSTC screenmodes as well as those nice productivity modes on your VGA monitor. The quality of the display is dependent on the quality of the monitor, but the difference between displaying PAL on a video monitor and on a VGA monitor is huge: on the VGA you get a crisp, steady image.

There appears to be little difference in the quality of the display produced by either of these devices, but there is a tiny flaw with the internal version. It does not reproduce the black border effect produced by hacks such as MCP. I assume this is because by plugging directly onto the motherboard it bypasses your Amiga's video generation route. A small niggle, but I'm rather fond of black borders.

Conclusion

The Micronik scan doublers are excellent. They provide a simple and elegant way of connecting your Amiga to a high quality monitor. The price may seem excessive, but compare the price of one of these and a good VGA monitor, with that of the relatively poor quality Amiga M1438 multiscan monitor and you'll be laughing. I can see no good reason to buy the internal A1200 version: the external version is unobtrusive and works better, anyway; if you have an A1200 in a tower case and are obsessively neat, the internal version may be preferrable. ■

Richard Drummond

Amiga Multiscan monitors

A multiscan monitor is one that can sync to a range of different horizontal frequencies. Amiga multiscans available include the Amiga M1438S and M1764S

Pros: can display all Amiga screenmodes; compatible with graphics cards.

Cons: expensive; generally poor quality, e.g; M1438S has poor contrast and brightness.

(PC multiscan monitors are also available but generally do not sync low enough to display 15KHz modes.)

Scan doublers

A scan doubler is a device which takes the video signal from the Amiga and doubles the horizontal frequency of the 15KHz signals to 31KHz and passes through any other frequencies. This allows you to display PAL and NTSC modes (as well as the productivity modes) on most VGA monitors.

Note that, for example, a PAL screenmode (15.6KHz) is doubled to 31.2KHz, which is actually less than the VGA standard of 31.5KHz. So it is possible to find VGA monitors that will not be able to display even scan-doubled PAL modes. It pays to shop around and to examine the specifications of a monitor before you buy it. Note also that a scan doubler is not the same as a de-interlacer. Interlaced screenmodes will still flicker.

EXTERNAL SCAN DOUBLER

System Requirements: Any Amiga

Ease of use 95%
The ultimate in Plug'n'play.

Performance 92%
Works flawlessly.

Value for money 88%
More expensive than the internal one, but still good value.

OVERALL
Well deserving of that exalted Boing Ball — **93%**

A1200 INTERNAL SCAN DOUBLER

System Requirements: Amiga 1200

Ease of use 65%
A real pain to install, but works invisibly thereafter.

Performance 89%
As good as the external version – except for the black border niggle.

Value for money 90%
Good – but save yourself the hassle and buy the external version.

OVERALL
An inexpensive route to a high quality display. — **88%**

HARD DISKS
For the Amiga 1200

PRICES INCLUDE CARRIAGE*

OUR PACKS COME WITH EVERYTHING YOU NEED TO INSTALL THE 2.5" DRIVE INTO YOUR A1200, CABLE, SCREWS, INSTRUCTIONS & 7 DISKS FULL OF HOT SOFTWARE LIKE DIRECTORY OPUS 4.12 (WORTH £50), MUI 3, MCP, GALAGA AGA, VIRUS CHECKER, MODS, REORG, ABACKUP AND MUCH MORE. ALL SOFTWARE CAN BE INSTALLED WITH OUR CLICK 'N' GO SYSTEM. DRIVES ARE PRE-INSTALLED WITH THE SYSTEM SOFTWARE & ABOVE DISKS - UNLIKE OTHERS WE PROVIDE THE DISKS JUST IN CASE!

WANT US TO FIT YOUR HARD DISK FOR YOU? CALL FOR MORE DETAILS.

FREE OPUS 4.12 WORTH £50

1.4GB	£169.99
2.1GB	£199.99
3.2GB	£299.99

MONITORS & SPEAKERS



SCANDOUBLER MKII IS OUR NEW EXTERNAL AMIGA TO SVGA HARDWARE BOX. IT AUTOMATICALLY INCREASES ANY AMIGA 15KHZ SIGNAL UP TO 31.5KHZ TO BE COMPATIBLE WITH AN SVGA MONITOR. AUTO PASS-THRU FOR AMIGA 31.5KHZ GENERATED SIGNALS. FULL 24-BIT SUPPORT - OTHER PRODUCTS ONLY OFFER 16-BIT! IDEAL SOLUTION TO PLAY GAMES AND RUN APPLICATIONS ON AN SVGA MONITOR.

SCANDOUBLER MKII	£79.99
14" DIGITAL MONITOR & SCANDOUBLER MKII	£219.99
15" DIGITAL MONITOR & SCANDOUBLER MKII	£259.99
17" DIGITAL MONITOR & SCANDOUBLER MKII	£399.99
50W STEREO SHIELDED SPEAKERS	£24.99
120W STEREO SHIELDED SPEAKERS	£34.99

PRICES INCLUDE CARRIAGE*

REPAIRS
by Qualified Technicians

- ALL AMIGA COMPUTERS COVERED
- PRICES FROM AS LITTLE AS £29.99
- MANY REPAIRS BY WIZARD REQUIRE NO PARTS
- PRICES INCLUDE INSURED COURIER COLLECTION & DELIVERY, LABOUR, FULL DIAGNOSTICS, SERVICE, SOAK TEST & VAT.
- FAST TURNAROUND
- ALL TECHNICIANS ARE FULLY TRAINED & QUALIFIED
- UPGRADES BOUGHT AT SAME TIME FITTED FREE!
- INSURANCE CLAIM WORK UNDERTAKEN
- 90 DAYS WARRANTY ON ALL REPAIRS

PRICES INCLUDE COLLECTION & DELIVERY

ALL FOR JUST £29.99 + PARTS

PARTS

WE HAVE A LARGE RANGE OF PARTS FOR ALL AMIGA'S - DRIVES, KEYBOARDS, MOUSE PORTS, CHIPS AND MORE. PLEASE CALL FOR PRICING DETAILS.

OPUS MAGELLAN
Amiga Operating System Upgrade



PRICES INCLUDE CARRIAGE*

£49.99

THE ULTIMATE WORKBENCH REPLACEMENT & FILE MANAGEMENT SYSTEM

COMBINES THE EASY TO USE WORKBENCH ENVIRONMENT AND THE POWER OF OPUS IN ONE ◆ REPLACE AND ENHANCE WORKBENCH ◆ OPUSFTP TO OPEN AN FTP SITE AS A FILE LISTER ◆ INTERNAL MULTI-TASKING SO YOU CAN PERFORM MULTIPLE FILE OPERATIONS SIMULTANEOUSLY (WORKBENCH CAN'T!) ◆ FILE-TYPE SPECIFIC PULLDOWN MENUS ◆ HOTKEYS ◆ SCRIPTING ◆ EXTENSIVE DRAG 'N' DROP THROUGHOUT ◆ ADVANCED AREXX SUPPORT ◆ PICTURE, SOUND & FONT VIEWER ◆ MUI & NEWICONS SUPPORT ◆ SORT LISTERS & DISPLAY VERSIONS AND FILETYPES ◆ FULL CYBERGFX SUPPORT

Workbench 2+ & Hard Disk Required

OFFICIAL AMIGA PREMIER DISTRIBUTOR



PRICES INCLUDE CARRIAGE*

NEW MACHINES FROM AMIGA INTERNATIONAL INC. ALL MACHINES ARE FULL UK SPECIFICATION AND COME BUNDLED WITH THE COMPLETE AMIGA MAGIC PACK SOFTWARE BUNDLE PLUS! ... DIRECTORY OPUS 4.12! ALL HARD DISK MODELS ALSO INCLUDE SCALA MULTIMEDIA 300 PRE-LOADED, THE OFFICIAL AMIGA HARD DISK MANUAL & HD INSTALL DISK.

AMIGA INTERNATIONAL, INC.
AMIGA 1200 MAGIC PACKS

68020/14.3MHZ
2MB RAM
No HD

PRICES INCLUDE CARRIAGE*

£199.99

68020/14.3MHZ 10MB RAM 170MB HD SCALA MM300	£299.99
68030/40MHZ 18MB RAM 170MB HD SCALA MM300	£349.99
68040/40MHZ 34MB RAM 1.4GB HD SCALA MM300 250W PSU	£579.99
68060/66MHZ 34MB RAM 2.1GB HD SCALA MM300 250W PSU	£749.99

PRICES INCLUDE CARRIAGE*

PowerBox
250w Amiga Power Supply

POWER-UP YOUR AMIGA WITH THIS 250W ENHANCED AMIGA PSU FOR LITTLE MORE THAN THE PRICE OF A NORMAL 25-30W AMIGA PSU! DESIGNED FOR A500/600 & 1200 (CD32 ALSO AVAILABLE). ENCASED IN STEEL SUBSYSTEM, ALL CABLES SUPPLIED, WHISPER QUIET FAN, ILLUMINATED ON/OFF SWITCH, MONITOR OUTLET ON BACK OF PSU, ONLY QUALITY/NEW PSU'S USED 3.5" & 5.25" POWER CABLES AVAILABLE TO POWER CD-ROMS, HARD DISKS ETC.

£49.99

POWERSTRIP - POWER 4 NORMAL PLUGGED DEVICES (MONITOR, PRINTER, SPEAKERS ETC) DIRECT FROM THE BACK OF POWERBOX. TURN ALL PRODUCTS ON/OFF WITH JUST ONE SWITCH. £19.99

PRICES INCLUDE CARRIAGE*

MAGNUM
A1200 Expansion Cards

FREE OPUS 4.12 WORTH £50

PRICES INCLUDE CARRIAGE*

	0MB	4MB	8MB	16MB	32M…
RAM8	£39.99	£54.99	£64.99	-	-
RAM8/40MHZ FPU	£49.99	£64.99	£74.99	-	-
68030/40	£79.99	£94.99	£104.99	£119.99	£13…
68030/40 & FPU	£89.99	£104.99	£114.99	£129.99	£14…
68040/25 & FPU	£149.99	£164.99	£174.99	£189.99	£20…
68040/40 & FPU	£189.99	£204.99	£214.99	£229.99	£2…
68060/50 & FPU	£289.99	£304.99	£314.99	£329.99	£34…
68060/66 & FPU	£329.99	£344.99	£354.99	£369.99	£38…



PRICES INCLUDE CARRIAGE*

FREE OPUS 4.12 WORTH £50

RAM8

PROVIDES A SPEED INCREASE OF 2.3 TIMES - 2.88MIPS ◆ AVAILABLE WITH 0, 4 OR 8MB OF 32-BIT RAM INSTALLED ◆ USES A STANDARD 72-PIN SIMM ◆ OPTIONAL PLCC TYPE FPU (FLOATING POINT UNIT) ◆ BATTERY BACKED CLOCK/CALENDER ◆ TRAPDOOR FITTING - DOESN'T VOID WARRANTY ◆ 0-4MB - PCMCIA COMPATIBLE (FOR USE WITH SQUIRREL ETC.) ◆ ZERO WAITE STATE DESIGN.



PRICES INCLUDE CARRIAGE*

FREE OPUS 4.12 WORTH £50

MAGNUM ACCELERATOR…

PROVIDE A … INCREASE OF … 44 TIMES … ◆ 68030, 68… 68060 PROCESSOR RUNNING UP TO 66MHZ ◆ MMU IN … PROCESSORS ◆ '040 FITS STANDARD A1200 - NO PROBLEM & IS S… WITH A HEATSINK & FAN ◆ UP TO 32MB OF RAM CAN BE ADD… ◆ KICKSTART REMAPPING ◆ OPTIONAL SCSI-II INTERFACE ◆ C… ACCOMMODATE A 72-PIN SIMM ◆ 68040/60 HAVE BUILT-IN F… ◆ BATTERY BACKED CLOCK/CALENDER ◆ PCMCIA COMPATIBLE SO T… CAN STILL USE PRODUCTS SUCH AS SQUIRREL ◆ ZERO WAITE STATE D…

SCSI-II INTERFACE FOR THE MAGNUM MKII CARDS - £69.…

560DPI 3 BUTTON MICE & MATS
for all Amigas & Atari STs

AWARD WINNING 560DPI RESOLUTION ◆ 90% RATING IN CU AMIGA ◆ MICRO SWITCHED BUTTONS ◆ AMIGA/ATARI ST SWITCHABLE ◆ ALL 3 BUTTONS CAN BE USED WITH MANY PROGRAMS SUCH AS DIRECTORY OPUS 5

BEIGE OR BLACK £12.99

FREE THIRD BUTTON DRIVER DISK

PRICES INCLUDE CARRIAGE*



MAT £2.99 OR £1 WITH A MOUSE

SATUR…
External 1Mb Floppy Dr… for all Amigas

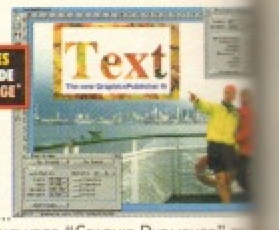
COMPATIBLE WITH ALL AMIGAS ◆ HIGH QUALITY SONY DRIVE ◆ ROBUST METAL CASE ◆ ANTI-CLICK AS STANDARD ◆ ENABLE/DISABLE SWITCH ◆ LOW POWER CONSUMPTION ◆ THRU PORT FOR EXTRA DRIVES ◆ WITH POWERCOPY HARDWARE/SOFTWARE BACKUP SYSTEM & 3 GAMES



£4…

TURBOPRINT 6
Printer Enhancement Software

PRICES INCLUDE CARRIAGE*



IF YOU HAVE A PRINTER - YOU MUST GET TURBOPRINT. IT RADICALLY ENHANCES THE PRINTOUTS YOU NORMALLY GET BY REPLACING THE AMIGA PRINTER SYSTEM WITH THE FASTER AND VISIBLY BETTER TURBOPRINT SYSTEM. OPTIONS INCLUDE POSTER PRINTING, COLOUR CORRECTION, DITHERING, COLOUR BALANCING, ON-SCREEN PREVIEW AND MUCH MORE.... MOST PRINTERS ARE SUPPORTED - CALL TO CHECK. INCLUDES "GRAPHIC PUBLISHER" TO … MULTIPLE PICTURES, INDIVIDUAL COLOUR CORRECTION, ROTATE, TWIST, NOW HANDLES TEXT! AUTO PHOTOOPTIMISER, TURBOSPOOL - PRINT SPOOLER, POWERPC ENHANCED, NEW DRIVERS FOR HP, CANON, EPSON STYLUS AND CITIZEN MODELS. AMIGA FORMAT GOLD. CU AMIGA AWARDS.

CALL ABOUT UPGRADES

£3…

PRINTERS



PRICES INCLUDE CARRIAGE*

THE EPSON RANGE OF INKJET PRINTERS IS CONSIDERED BY MOST AS TH… AVAILABLE. WITH OUR ADVANCED KNOWLEDGE OF TURBOPRINT WE A… PLEASED TO OFFER THE COMPLETE RANGE OF STYLUS PRINTERS INCLU… THE NEW STYLUS 6-COLOUR PHOTO PRINTER. ALL PRINTERS INCLU… BI-DIRECTIONAL PARALLEL PRINTER CABLE. WE ALSO OFFER TURBOPR… £35 IF BOUGHT WITH A PRINTER.

STYLUS 300 - 3PPM, 720DPI, 4 COLOUR	£139.99	& TURBOPRINT6	£17…
STYLUS 600 - 6PPM, 1440DPI, 4 COLOUR	£229.99	& TURBOPRINT6	£26…
STYLUS 800 - 8PPM, 1440DPI, 4 COLOUR	£299.99	& TURBOPRINT6	£33…
STYLUS PHOTO - 6 COLOUR - PHOTO QUALITY	£299.99	& TURBOPRINT6	£33…

ALL WITH A FREE BI-DIRECTIONAL PRINTER CABLE

PC TASK 4
Advanced 486 PC Software Emulator

VERSION 4.4 NOW SHIPPING

CALL ABOUT UPGRADES

PRICES INCLUDE CARRIAGE*

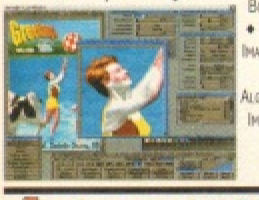
FEATURING ADVANCED 486 SOFTWARE EMULATION, DYNAMIC COMPILATION FOR FASTER EMULATION, UP TO 16MB ACCESSIBLE UNDER MS-DOS, MDA, CGA, EGA, VGA & SVGA SUPPORTED, UP TO 256 COLOURS ON AN AGA MACHINE, CYBERGRAPHIC SUPPORT, MULTIPLE HARD DISK FILES OR PARTITIONS SUPPORTED, CD-ROM AND HIGH DENSITY DRIVES SUPPORTED, RUN MS-DOS APPLICATIONS IN A WINDOW ON WORKBENCH! RUN WINDOWS 3.1 IN ENHANCED MODE! MANY TIMES QUICKER THAN VERSION 3.1. REQ. KICKSTART 2 OR ABOVE & A 68020 PROCESSOR OR BETTER.

£69.99

IMAGE FX 3
The Complete Image Processing Solution for all Amigas

CALL ABOUT UPGRADES

NOVA ~~DESIGNS~~ HAVE DONE IT AGAIN! FX 3 IS BREAKING YET MORE BARRIERS IN AMIGA IMAGE PROCESSING AND MANIPULATION. FX3 INCLUDES ◆ NEW USER INTERFACE ALLOWING MULTIPLE IMAGE BUFFERS & VIEWS ◆ INSTANT ASYNCHRONOUS REDRAW ◆ REAL IMAGE LAYERS ◆ READ/WRITE PHOTOSHOP FILES ◆ FRACTAL CLOUD GENERATION ◆ BLOW IMAGES APART WITH THE SCATTER MODULE ◆ LIQUID EFFECTS WITH THE SPLASH MODULE ◆ PAGECURLER, FXFORGE ALGORITHM EFFECTS THAT YOU CAN ADD TO YOURSELF! IMPROVED EPSON SCANNER MODULE AND MUCH MORE......!! REQUIRES 2MB & HARD DISK.

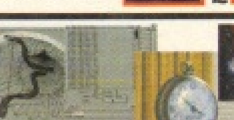


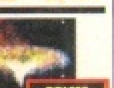
NOW SHIPPING

PRICES INCLUDE CARRIAGE*

£179.99

ALADDIN 4D
Ultimate Rendering Power





THE MAKERS OF IMAGEFX PRESENT THE FASTEST AMIGA RENDERING PACKAGE EVER! FEATURE PACKED WITH ADVANCED MODEL AND WORLD TOOLS. MODULAR DESIGN, SURFACE LAYERING, CYBERGRAPHX SUPPORT, ULTRA-FAST RENDERING, IMAGES UP TO 32,000 x 32,000 PIXELS CAN BE GENERATED....... REQUIRES 5MB, HARD DISK & FPU

PRICES INCLUDE CARRIAGE*

£99.99

WIZARD DEVELOPMENTS

PRICES INCLUDE CARRIAGE*

ORDER HOTLINE 0181-303-1800

SWITCH · VISA · MasterCard · FAX 0181-303-1861

See Our NEW Internet WEB Page

www.wizard-d.demon.co.uk

WE ARE OPEN 9AM AND 5.30PM, MONDAY TO SATURDAY, TO PAY BY CREDIT CARD. TO PAY BY CHEQUE OR POSTAL ORDER PLEASE SEND YOUR ORDER TO - WIZARD DEVELOPMENTS, PO BOX 123, SIDCUP, KENT, DA15 9ZY

Cheques should be payable to WIZARD DEVELOPMENTS. * Prices include VAT & carriage to the UK mainland. Non-UK mainland carriage for most orders (except Printers, Monitors & Computers) is £10 per order. VAT Free sales available for Non-EC. All products are subject to availability. E&OE. Advertised prices & specification may change without notice. All sales are subject to our trading conditions - copy available on request.

ALSO AVAILABLE

EASYLEDGERS 2 - THE ONLY FULL ACCOUNTS PACKAGE, AMIGA FORMAT GOLD - CALL ABOUT TRAIL OFFER - HARD DISK/2MB RAM REQ. £119.99

GP FAX - SEND FAXES TO AND FROM YOUR AMIGA. EVEN FAX DIRECTLY FROM YOUR APPLICATION. AMIGA FORMAT GOLD - FAX COMPATIBLE MODEM REQUIRED £44.99

40MHZ FPU KIT - PLCC TYPE FPU & CRYSTAL £24.99

A500 512K EXPANSION	£14.99
A500PLUS 1MB EXPANSION	£19.99
A600 1MB EXPANSION	£19.99

ALL WITH A FREE OPUS 4 WORTH OVER £50

PRICES INCLUDE CARRIAGE*

50 2S/DD DISKS & LABELS	£14.99
100 2S/DD DISKS & LABELS	£24.99

4MB 72-PIN SIMM	£15
8MB 72-PIN SIMM	£25
16MB 72-PIN SIMM	£40
32MB 72-PIN SIMM	£60

ALL SIMMS ARE NEW AND HAVE A 1YEAR WARRANTY

PRICES INCLUDE CARRIAGE*

BSB
Books & Videos

PRICES INCLUDE CARRIAGE*

- INSIDER GUIDE - A1200
- INSIDER GUIDE - A1200 NEXT STEPS
- INSIDER GUIDE - ASSEMBLER
- INSIDER GUIDE - DISKS & DRIVES
- TOTAL! AMIGA - WORKBENCH 3
- TOTAL! AMIGA - AMIGADOS
- TOTAL! AMIGA - AREXX
- TOTAL! AMIGA - ASSEMBLER
- MASTERING AMIGA SCRIPTS
- MASTERING AMIGA BEGINNERS
- MASTERING AMIGA PRINTERS
- MASTERING AMIGADOS 3 - REFERENCE
- MASTERING PROGRAMMING SECRETS

AMIGADOS PACK
TOTAL! AMIGA - AMIGADOS & MASTERING AMIGADOS 3 … REFERENCE USUALLY £43.94 - SAVE NEARLY £9

A1200 BEGINNER PACK
2 BOOKS (INSIDER A1200 & NEXT STEPS), A 60 MIN… 4 DISKS OF PD TO GO WITH THE BOOKS/VIDEOS

A1200 DISK DRIVE PACK - NEW
INSIDER DISKS & DRIVES, A 90 MINUTE VIDEO, 1 DISK & REFERENCE CARD

Sirius Genlock

AMIGA MAGAZINE SUPERSTAR

■ Price: £599 ■ Supplier: White Knight ✆ 01920 822 321

As the name and price tag imply, the Sirius Genlock is a high quality, professional device. It has a host of features and effects to enable you to produce superb video output.

What a genlock allows you to do is; synchronize and mix your Amiga's video output with an external video source, say a camcorder or video player. This is called keying. In conventional keying, the external video source is displayed instead of the Amiga's background colour. This lets you overlay graphics on a video stream, perhaps for titling purposes.

The Sirius also has other keying operations: alpha channel keying makes certain the Amiga's colours become 'alpha colours', consisting of 50% video image and 50% computer image. This can be used, for example, for anti-aliasing effects to blur the borders of objects or for semi-transparent frames. And bluebox keying, which is where the video picture is keyed over the computer picture. Either all colours of a certain luminance in the video (luma keying) or a specific colour (chroma keying) will show the computer image. This is a well-known effect from TV weather forecasts, etc.

The Sirius also features an inverse keying mode (which can be applied to all the above modes), image controls (to correct the white balance, contrast or luminance of your video source), and a two-channel audio mixer and filter.

The hardware

The genlock is a console-shaped box with an array of membrane keys, feedback LEDs, an LCD display, slider controls and various ports for connectors – and looks deceptively toy-like for £600. It comes supplied with all the necessary leads to connect up to your computer, a power supply, software and a mangled but comprehensive manual.

The console is well laid out and the controls are simple to use. Apart from selecting the bluebox keying colour, all functions may be operated from here. The keys select the various functions and modes and are separated into 6 banks: status, image, keying, fade, audio and sound. The four sliders control fading – two video faders, one for the computer image and one for the video; and two audio faders, one for each channel.

In manual fading mode the video faders control the level of each video source (from 0 to 100%) in the final output; in auto fading they set the fading time for each source (from 0.1 to 20 seconds). The audio faders set the volume of each audio channel in the audio output. Various modes exist for the audio fading, including the ability to link audio channels with video sources enabling them to be faded in conjunction.



Software

Although it is possible to use the Sirius genlock from its console, when it is controlled by your Amiga (via a standard serial cable) you realise its full power.

The software supplied for this purpose is a commodity called SeriusHotkey, which is really just a GUI version of the console controls. It's not pretty, but nevertheless it is functional.

The genius of the software is the hot key support and the ARexx interface. Hot keys permit many features of the genlock to be controlled from your computer's keyboard without actually having the SiriusHotkey window open; with this, for example, you can perform fades from PPaint. The ARexx port allows an even greater degree of control from other applications. It is possible, say, to create a script in Scala to do fades and effects on cue.

This takes a lot of the hassle out of video editing; otherwise it requires just too many hands to operate a computer, camcorder, video recorder and genlock simultaneously.

Conclusion

The quality of output from the Sirius is excellent; There is no visible or audible noise produced during operation – although to achieve good results, a high quality video source is needed. In addition, getting good results using bluebox keying is difficult and time-consuming.

Having said that, the Sirius is a first class product. It will take patience and practice to get professional results, but I have no doubt that with the Sirius genlock it is possible. ■

Richard Drummond

Connectors

RGB in – video from Amiga
Video in (composite and Y/C)
2 x audio in (phono)
Microphone in (3.5mm stereo jack)
Serial in (9 pin) – for software control
RGB out – to Amiga monitor
2 x video out (composite and Y/C) – mixed video output
audio out (phono) – mixed audio output
Power in (12V)

SIRIUS GENLOCK
Developer: Electronic-Design

System Requirements:
Amiga OS2+, RGB monitor

Ease of use 89%
Easy to use, difficult to use well.

Performance 92%
Outstanding features and results.

Value for money 81%
Expensive. But you get what you pay for.

OVERALL
Superlative video output – at a price
90%

Latest CD Games

SHADOW OF THE 3rd MOON
3D flight-simulator featuring State of the Art graphics, sound and animation..
Highly Rated Worldwide!
It's like no other game on the Amiga.
Requires 6mb ram and at least 030 processor.
Order: CD562x £19.99

CIVILIZATION
"Build an Empire to Stand the Test of Time". Discover New Technologies - Build Wonders of the World - Determine the Fate of your People.
No.2 Best game ever.
Order: CD454x £12.99

ULTIMATE GLOOM
"Gloom 3" The Ultimate version of Gloom, The Amiga's answer to Doom, Brilliantly Fast 3D graphics and BLOOD like you've never seen in a game before.
Order: CD472x £12.99

STREET RACER
The Amiga Version of the World Famous PlayStation game. Wickedly fast graphics..
CD Version requires 4mb
Order: CD478x £12.99

SUPER SKIDMARKS +
Brand New Release! Features the best Top-Down Racing action ever...Over 40 tracks, 40 Unique vehicles: Ranging from Aircraft to Shopping Trollies.
Order: CD493x £12.99

DOOM TRILOGY (3 CD'S)
Suitable for any AGA Amiga with 8mb ram,
Graphic Card Enhanced. 030 or above recommended.
Order: CD600 ***Only £17.99***

NEMAC IV
The Ultimate 3D "doom" clone featuring stunningly fast 256colour - 3D graphics and awesome sound effects.
Rated 90%+ Worldwide.
Order: CD477 £19.99

BIG RED ADVENTURE
After the success of the PC version, The BIG RED ADVENTURE is now available on Amiga CD, featuring great high-res graphics.
Order: CD455 £19.99

VIRTUAL KARTING 2
Forget those boring "flat" 3D-racing games. Virtual Karting2 is the fastest Karting Simulation available. Suitable for any AGA Amiga but on an 030 it really moves!!!
Order: CD597 £14.99

PINBALL BRAIN DAMAGE
Pinball Brain Damage is an exciting new AGA only Pinball simulation, featuring Super-high-res graphics!, multi ball, multi flipper and tons of other features.
Order: CD486 £19.99

Also Available!
Foundation CD £27.99
On-Escapee CD £27.99
Quake Amiga CD £29.99
Genetic Species CD £27.99
Final Odyssey CD £27.99
Uropa2 CD £27.99
Flyin' High CD £14.99
Cannon Fodder CD £4.99
Theme Park CD £12.99

Audio CD's

FILTHIEST PARTY ALBUM
14 **Adult** audio tracks including: Hey Santa Claus, Who the ???? is Alice?, The W?an?er Song etc.
Order: MUS01 £9.99

BACK IN TIME
15 All time classic C64 tunes re-mixed onto Audio CD. Tracks by Rob Hubbard etc.
Order: MUS64 £12.99

Productivity

DELUXE PAINT 5
Deluxe Paint as a product is the envy the the whole PC world, It's features and ease of use are not matched by any other graphics package either on the Amiga or PC. Deluxe Paint 5, the latest release, is no exception. Deluxe Paint 5 is without a doubt the fastest paint package available on the Amiga, It's unique palette feature supports virtually all the Amiga's graphics modes. Deluxe Paint 5 includes the most powerful yet simplest to use animation feature you could imagine. Direct support for all the Amiga's animation formats are included as well as of course the industry standard IFF picture format. Includes full printed manual.
EXCLUSIVE! *Supplied with a free bonus CD containing Colour Fonts, Clipart, Piccys etc.*
Order: CD499 Only £17.99

SOUND EFFECTS VOL:1
Over 15,000 files. Includes sound effects from all over the place, including Animals, Nature, Horror, House, Crash, Explosions etc, etc.
Order: CD165x £9.99

BLITZ BASIC 2.1
A next generation BASIC with features borrowed from PASCAL, C and others. Program any type of software with more power than ever before. Complete with full manual. Also available on floppy disk. The Special CD version also contains the complete series of BUMs (Blitz User Manuals)
EXCLUSIVE! *Supplied with free bonus CD containing source-code, graphics, fonts & samples.*
Order: CD500 £17.99

ELASTIC DREAMS
Contains both PPC and Amiga versions of the Amiga's answer to KAI's Power Goo. Powerful graphics manipulation tool. See press for review.
Order: CD604 £49.99

ART STUDIO PRO
Image cataloguer, converter and processor. Supports IFF, ANIM, AVI, MPEG, MOV, FLC, GIF, TIF, PCX, PHOTO CD and all the rest, including TIM (Playstation image format).
Full specs are available on request.
Order: CD603 £44.99

3D OBJECTS
Thousands of DXF compliant 3D objects suitable for use with either Lightwave or Imagine. All popular categories included like : Space, Furniture, Buildings, Objects, etc, etc.
Order: CD215x £7.99

MAGIC WORKBENCH
Magic Workbench Enhancer is a stylish Amiga CD-ROM containing not only Magic Workbench but also around *10,000 new Workbench Icons, Backdrops and Desktop tools.* Enhance Workbench even more.
Order: CD187x £14.99

DESKTOP VIDEO CD VOL:2
Amiga Desktop Video CD volume 2 contains hundreds of megabytes of Video related backdrops, fonts, samples, and clip images. The CD also includes a **full version of Scala**.
Order: CD404x £9.99

WORLD OF CLIPART PLUS
World of Clipart Plus is a double CD-ROM containing **40,000** mono and colour clipart images. It includes over **100 categories** including: animals, people, vehicles/transport, food&drink, zodiac, xmas, cartoon, music, computers, technology, babies, women, men, dogs, cats, birds, office equipment, trees and dozens more.
Order: CD77x £14.99

20,000 WEB GRAPHICS
This comprehensive resource has everything you need to help you develop a professional looking web site. Includes over 7,000 animated GIFS, as well as 13,000 fast-loading buttons, flags, banners, dividers, symbols, bullets, arrows, alphabets and more, ALL ROYALTY FREE!.
Order: CD584 £9.99

From only £2.99

CD32 Titles

01.Vital Light £2.99
12.Marvins Marvelous Adv.£2.99
14.Gaurdian £2.99
16.Chaos Engine £2.99
17.Alfred Chicken £2.99
19.Chuck Rock £2.99
22.John Barnes Football £2.99
23.Last Ninja 3 £2.99
31.Total Carnage £2.99
34.Oscar & Diggers £2.99
43.Video Creator £2.99
44.International Karate + £2.99
50.Super League Manager £2.99
51.Bubble & Squeak £2.99
53.Naughty Ones £2.99
54.Clockwiser £2.99
CD580. Fields Of Glory £14.99
CD501.Cannon Fodder £4.99
CD493.Super Skidmarks £12.99
CD563.Simon the Sorcerer £14.99

Other titles available....
Most are suitable for use on A1200's with CD-ROM drive!

Games Collections

ARCADE CLASSICS PLUS
Arcade Classics Plus includes hundreds of variations of all the classic arcade games, such as *Pacman, Invaders, Tron, Galaxians, Frogger, Tempest, C64 conversions, Q-Bert, Trail Blazer, Scramble, Ping-Pong, Pengo, Missile command, Breakout, Bezerk, Donkey Kong, Tetris* and tons more great games.
Order: CD76 £14.99

THE GAMES ROOM
The Games Room is an original compilation of Gambling games. It covers everything from Fruit Machines to Card Games, including Klondike, Poker, Solitaire, Rummy, BlackJack, and Roulette, Darts, Bingo, Pool, Checkers, Chess, Backgammon, Dominoes, Various Board Games like Monopoly and Cluedo, Mastermind, Pub Quiz's and a wealth of other Casino related games and far more...
Order: CD451 £12.99

NOTHING BUT TETRIS
Around 100 variations of the all-time classic game "Tetris". All the games are runnable from the CD.
Makes a great gift for anyone!
Order: CD148 £9.99

Latest CD Games

SIMON THE SORCERER
"Simon the Sorcerer" is one of the Amiga's most loved graphic adventures."The animation has to be seen to be believed." CUAmiga
The voice of simon is Chris Barrie (Mr Britas).
Suitable for Amiga CD / CD32
Order: CD563 £14.99

SIXTH SENSE Investigations
SixthSense Investigations is an amazing new Amiga arcade adventure, featuring 32 locations, full character dialog, 3 different worlds, many interactive characters, puzzles and more. This game sets new standards for Amiga gaming.
Based on the classic style of LucasArts Graphic Adventures.
System-requirements:
Amiga1200/4000/CD32
2mb ram, 4mb Recommended.
Order: CD430 £29.99

Adult CD's

ANIME BABES SPECIAL EDITION
Thousands of high quality Manga style GIF Images. Contains scenes of nudity and sex.
Order: CD491 £19.99

ANIME BABES VOLUME ONE
Thousands of high quality Manga style GIF Images.
Order: CD191x £14.99

Applicatio...

MINI OFFICE
This superb easy to use office... is great for the home and small... ness, It includes a Word Proce... with a spell checker, Database... Spreadsheet and more.
Order: MINIOFFICE £17.99

BLITZ BASIC 2.1
A next generation BASIC with ... tures borrowed from PASCAL, C... others. Program any type of so... with more power than ever befo... Complete with full manual. Includes full manuals.
Order: BLITZ £17.99

DELUXE PAINT 5
Deluxe Paint 5 is without a dou... fastest paint package available ... the Amiga. Deluxe Paint 5 inclu... the most powerful yet simplest ... animation feature you could ima... Includes full manuals.
Order: DPAINT £17.99

CRAFT FOR AMOS
Adds over 120 new commands ... Amos and Amos Professional. ... for every Amos user.
Order: CRAFT £9.99

INTER SPREAD
Interspread supports over TEN ... LION cells at once. Data can be ... resented graphically using pie c... and bar graphs etc.
Order: INTERSPREAD £5

AMI-PC LINKUP
Network your Amiga upto a PC ... make use of ALL it's drives, Including: CD-ROM, Zip, Hard d... High-Density Floppy etc, etc.
Order: AMI-PC LINKUP £17.99

MOUSE-IT
Allows connection of virtually an... mouse, Trackball or pointing de... to the Amiga. Plugs into your se... port.
Order: MOUSEIT £7.99

INTER BASE
Quick and easy to use, Interbas... the perfect solution when it com... Amiga databases, easily transfe... data from interbase into other s... ported applications, print labels...
Order: INTERBASE £5

AVId PROFESSIONAL
The fastest and most powerful A... player for the Amiga. Includes ... sions for A500+ / A600 / A1200 ... A4000 and A5000.
Order: AVID £poa

BURN IT V2.1
BurnIT is the Amiga's most pow... CD-R burning software. Can cre... audio and data CD's. Easy to u... and supports 60+ CD-R drives.
Order: BURNIT Standard: £34.99
Order: BURNIT Professional: £69...

TURBO PRINT 6.01
The ingenious printer driver sys... TurboPrint prints the full colour ... trum directly from your favourite ... ware package. Print at the very ... quality! (Supports all the latest print...)
Order: TURBOPRINT : £39.99

Adult CD's

ADULT SENSATION VOL:1
4000 high quality GIF Images...
Order: CD01x £7.99

ADULT SENSATION VOL: 2
4000 images, 70's images, a f... games, Animations, Adult sto... Adult music and samples and ... more.
Order: CD115x £7.99

ADULT SENSATION 3D
1000 Adult 3D images, comple... with 3D glasses. *Watch yours... with this one!*
Order: CD145x £7.99

ADULT SENSATION VOL: 5
Volume 5 consists of dozens o... Adult related games like: Strip ... Poker, Tetris Sex, Adult Fairy ... Tales, Friday Night Pool and ...
Order: CD567 £19.99

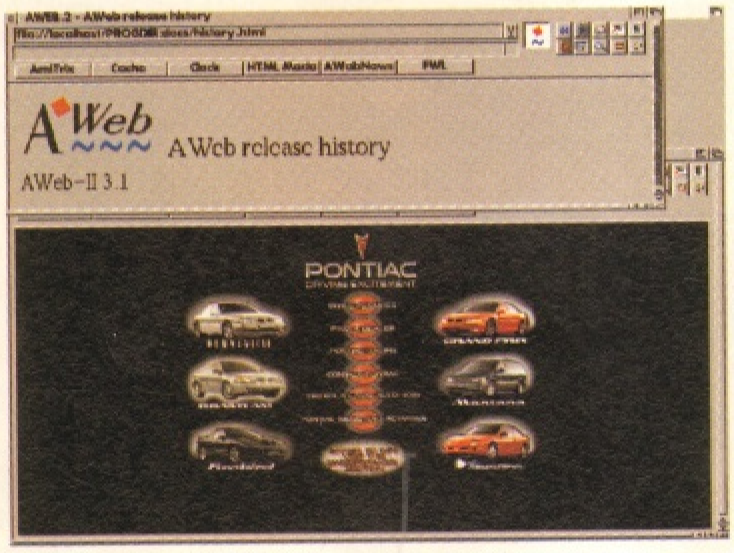
These "Adult" titles are strictly for purchase by A... over the age of 18 Only. We hold over 50 diffe... Adult titles in stock, So please call for a catalog...

AWeb-II 3.0

■ **Price: £29.95** (check website for upgrades) ■ **Available from: Blittersoft © 01908 261466** www.amitrix.com/aweb.htm

AWeb-II 3.1 is packing serious heat and the competition is scrambling to respond. Has the former number 3 taken top honors?

The August '97 issue of CU Amiga marked the last Battle of the Browsers , and AWeb-II 3.0 (the -II reflects the commercial, rather than the shareware version) came in a strong third. But third is last in this race. Yvon Rozjin, author of AWeb, has responded strongly to this result.



▲ Javascript makes shopping for a car online more fun

It's been a while since AWeb was responsible for a groundbreaking first. His original AWeb was arguably the first truly usable browser on the Amiga, but it's been IBrowse and Voyager who have dominated development in recent times – the usual pattern is that Voyager comes out with a feature first, then IBrowse implements it in a stable form. Now AWeb leaves them both choking, with the first Amiga Javascript support.

Javascript, not to be confused with Java, allows webmasters to do a number of clever things on their websites that conventional HTML can't do comfortably or at all. For example, if you want to see that new car in black, just put your pointer over the black on the palette, and lo and behold, the car turns black. Cycle gadgets can be made to automatically react to a selection, rather than waiting for you to hit a "go" button.

They're gimmicky things, but like frames, more and more sites are using them and it's very difficult to "browse around" Javascript. If your browser doesn't support it, many sites won't work at all. And for the time being, AWeb-II is the only way to view them.

Righting the Wrongs

There were some vital features missing from AWeb-II 3.0, and most have been added. Secure transfers are now available through the MiamiSSL system. Although this does require you to own a registered version of Miami, the investment is quite possibly the best you'll ever make for your Amiga.

SSL gives you access to a world of security, and while that doesn't eliminate some of the other dangers of ordering product over the web (SSL doesn't protect you from outright fraud on the part of the seller), it's valuable peace of mind.

The graphics handling is vastly improved. One of the major complaints of last year's review was AWeb's lack of progressive image loading and AnimGIF support. These have now been fixed, although this requires installing plug – in modules. The AnimGIF module is shareware, but reasonably unobtrusive. The other modules allow progressive JPEG, GIF, and PNG loading, just like the other two browsers on the market.

The Feel of AWeb

In part because it is non-MUI, AWeb has a different look and feel than its competition.

One of the more obvious changes is the lack of cycle gadgets, common to most browsers. AWeb instead presents a scrollable list. And while the last review railed against this, it can be a real benefit. In IBrowse, if you have a cycle gadget with a list larger than can be shown on the screen, IBrowse will simply not show the list at all – you have to cycle blindly. Voyager has gained the ability to bring up a pop-up window similar to AWeb's. On other platforms, the browsers tend to bring up a scrollable list. So while AWeb may not be "standard", it's more effective than an alternative.

Another major issue is as basic as clicking links – AWeb is amazingly fussy about it. On most browsers, you can casually click links on the fly. But AWeb doesn't like you to move the pointer around much, particularly if you leave the confines of the link while clicking. Because it doesn't have as violent of visual changes as IBrowse and the loading gadget is fairly small (unlike the huge "Knight Rider" progress bars of the MUI browsers) it's often hard to tell if you've missed the link or the network is merely thinking about whether it wants to honour your request. I'd prefer a less stingey click detection.

▶ GIF anims, progressive loading, the works



Living in AWeb

While I'm not personally a big believer in it, Netscape is designed so that, if you so chose, you could use a single program for most of your online activities; browsing, reading e-mail and news, FTPing, and so forth. AWeb has the most well-rounded assortment of "add-ons" to follow this example. You can comfortably use AWeb for newsreading and handling all of your e-mail. If you want to configure AWeb to do it, there are a few extra steps and you'll want to have your ISP information handy, but after that it's very smooth sailing.

Javascript, no goofy layout and image handling problems like Voyager, better cycle lists and (marginally) more frequent updates than IBrowse. AWeb-II 3.1 has climbed back up the ladder. It may not be good enough to be undisputed top dog, but it's worthy of respect. ■

Jason Compton

AWEB-II 3.0

System Requirements: 2 Megs memory (4 highly recommended), OS 3.x.

Ease of use 83%
Too bad about needing those plugins

Performance 93%
Definitely back in the game

Value for money 87%
Competitively priced

OVERALL
Worthy of the Superstar for a very important innovation
90

MasterISO V2

■ Price: £59.95 $119.00CAD ■ Developer: Asimware ■ web: http://www.asimware.com
©+1 905 575 1042 UK – Blittersoft ©+44 (0)1908 261466

Asimware upgrade their ageing CD-R software for CD-RW support – amongst many other things. The features list is very impressive – does the software match?

Asimware have developed a reputation for producing very professional Amiga software. MasterISO reigned king of the Amiga CD-R packages for a while largely because it was the only one to do all the necessary things. Time, and the growing popularity of CD writers, took their toll and soon young upstarts MakeCD and BurnIT were making MasterISO look distinctly dated. The latest release of MasterISO seeks to recover lost ground.

Extensive use of click tabs, pop-up and pull down menus, radio buttons and list gadgets makes the front end clean and straight forward – a major improvement over the horrendously ugly V1. It is not exactly enough to make MasterISO what you would call easy to use, but that is the nature of the rather complex beast rather than a failing in presentation.

Feature packed.

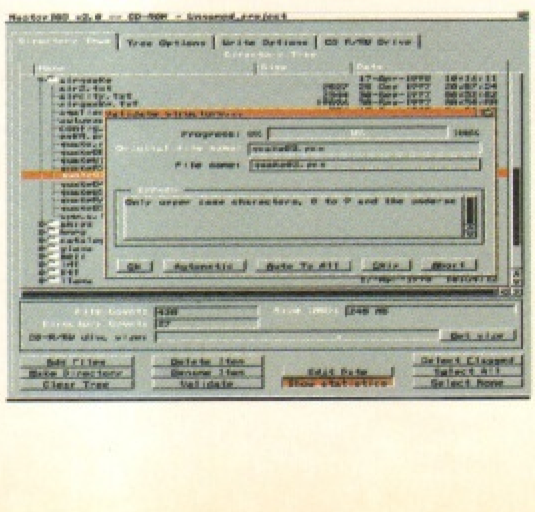
In terms of feature support, MasterISO V2 is extraordinarily extensive; for control of every aspect of the CD writing process, it is hard to see where Master ISO misses out. Aside from TAO and DAO support, it covers ISO9660, Rockridge and Joliet extensions with volume information in each extension fully editable. CD-RW comes in for full coverage including disk erasing, and the CDDA writing system is impressive with on the fly conversion from MAUD, 8SVX, Samplitude HDP, AIFF, WAV and Studio16 formats, along with features like mono file fusing and auto sample rate conversion. There are read ahead buffers, multiple copy writing for "jukebox" systems, performance measurement and even – an Amiga first – firmware upgrade support, although at the moment for Yamaha drives only.

The main options allow you to select Erase CD-RW media, copy from a CD-ROM drive to a CD writer, handle audio disks or handle data disks, or run basic performance checks on your hardware. The data screen presents you with a tree structure builder for putting together the directory tree of your disks. The presentation is excellent within the limits of the GUI system (looks like ClassAct), and in theory this allows you to build the structure of the CD you are writing by designing a layout of files from any number of sources. In practice there didn't seem any way to copy a directory straight into a tree, instead a new directory has to be made and then the target directory opened from the file requester. Any nested sub directories are copied fine, so this is an annoyance rather than a fatal flaw. Support for ISO 9660 and all the main file extensions is superb and well configured, with a comprehensive validation system to ensure that the file names and extensions are valid under the selected file system. An odd quirk in the GUI can send the progress bar into the thousands of percent while this operation proceeds, but don't worry, it doesn't take long.

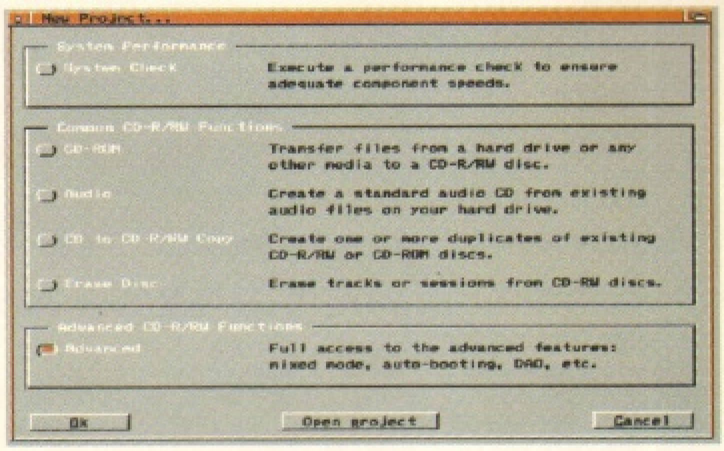
The Audio write section works very simply, allowing tracks to be added on a track by track basis, accepting various file formats for on the fly translation as well as gap insertion and direct DOS file CDDA reading.

Direct control

If you need something a little more complex, the advanced options open a whole lot more control, introducing direct track by track control of the disk structure, mixed audio/data structuring and Disk at Once mode. This makes disk creation very flexible but also very complex; you will have to know about the legal ISO index structures. Most of what you want is better left to the simple options,



◀ Using the directory tree window to set up a data CD.



▲ The options screen. Grey, but functional – and a big improvement over the last version.

but if you want to try something more complex, Asimware help you out with an excellent manual.

The 230 page instruction manual manages to be not just a guide to using the software but a reasonable introduction to the theory of CD writing as well. It repeats a lot of the information, because it ensures that everything you need to know is covered under each topic. This makes using the software that much easier, because you don't have to hunt around the manual cross-referencing things. If it had an index I would have no complaints; as it stands, it is still one of the best manuals I've seen in ages.

MasterISO is an excellent piece of software in many ways, but let down by a few quirks in the GUI. The professionalism, level of support offered and completism is impressive, particularly as it is very reasonably priced. I am not sure it is the package I would choose if I just wanted to back up data, make the odd shareware collection or chuck a bit of audio on a shiny disk, but for producing commercial CDs the extension support and validation could be invaluable. ■

Andrew Korn

MASTERISO V2

System Requirements: OS2+, 4Mb Fast, HD, supported ATAPI or SCSI CD-R/RW. 68040/060, SCSI, ASIMCDFS and 16Mb for advanced features.

Ease of use..80%
Good manual, but tricky subject. Some GUI problems.

Performance..................93%
Feature packed and extraordinarily comprehensive.

Value for money.............87%
Professional software at home prices.

OVERALL
A great all round package.
88%

Power Digital Camera



■ **Price: £99.99**
■ **Developer: Power Computing ✆ 01234 851500**

Fast developing a reputation for getting you there as cheap as possible, Power's latest gets you into the world of digital photography for under a ton.

Digital photography seems to be really taking off on the Amiga at last. The Power Computing digital camera not only promises trouble-free digital photography, it does so at a very tempting price.

Although you can buy yourself a digital camera from a camera shop and either use one of the shareware software packages or buy the commercial offering from Versalia, getting a full package like this should ensure that everything actually works. For your hundred pounds, Power Computing supply you with a camera, all the cabling you will need, a power brick to save on batteries when using the camera near a power point, and the software necessary to download the images from your camera to your Amiga.

The first test is to get the thing up and running – this, the Power Camera passes with flying colours.

Simple software

The software comes with a very simple installer, and follows the trend with a very simple front end. A cable and converter link the camera to the serial port on the back of your Amiga – only a few minutes to set up.

The software presents a straightforward GUI on your Workbench, which really needs no instructions. Click a button gadget and it reads the number of shots in the memory card. Any or all of these can be downloaded and saved to disk as a JPEG, PNG or IFF24, or displayed on screen. The software can also tell the camera to take, and has a basic timer function. You can set the download speed for the serial port, but you won't get much luck above 19200 baud using a standard Amiga serial port. Luckily you can choose device driver, permitting faster downloads for owners of Surf Squirrels or similar fast serial ports.

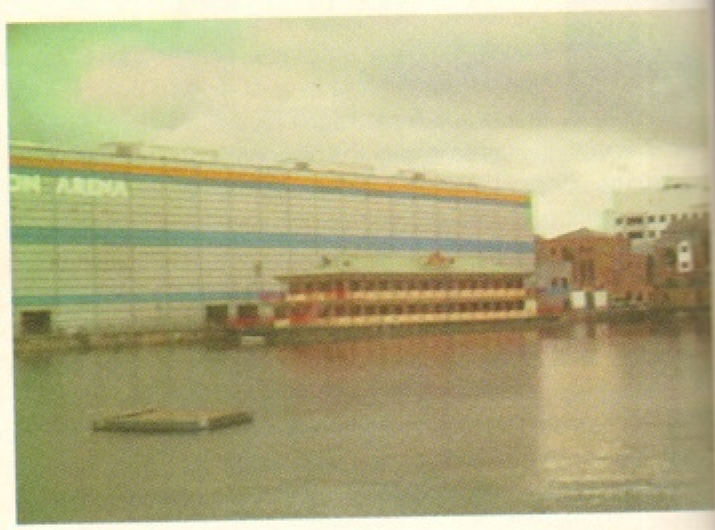
It's always a pleasure to use software as well laid out as this, but in part that can be put down to the simplicity of the task it is performing. I would like to have seen multiple settings on the timer for time lapse photography, an ARexx port, and a facility to display a thumbnail of downloaded images – but at this price you can't expect all the frills. It does what it sets out to do well and simply, which is more than you usually get when you go bargain hunting.

Colour me bad

Unfortunately the end result is not as impressive. The resolution of the camera is a respectable 640 by 480, more than you would expect at this price point, but the ultra low grade optics and the cheap electronics take their toll. There are two settings for image quality, to allow either 16 "high grade" or 27 "standard" images to be saved on the memory card, but even at the higher grade, the images are soft and indistinct in comparison to even some lower resolution cameras. Colour balance is pretty poor too; the camera suffers more from the ill effects of different forms of lighting than more expensive cameras do. As a result, images taken under fluorescent light undergo colour splitting to green and magenta, while under tungsten light everything goes brownish.

The Power Camera system is the cheapest way you can possibly get into digital photography, and comes packed with features, but when you pay this little you shouldn't expect miracles. If the image quality was great as well, I'd be sending bottled water to Power Computing for them to turn in to wine. If you can live with the image quality then you'll be very happy indeed, if you need better quality then look elsewhere – but be prepared to spend a fair bit more. ■

Andrew Korn



▲ A sample image from the Power camera

Live and Direct

The camera used by Power Computing is the VDC100 from well-known budget scanner manufacturer, Mustek. The Mustek VDC100 sports a dual aperture (f2 and f8, and a little macro lens for close up work, and a simple viewfinder. There is no flash.

Matching much more expensive cameras, the VDC100 has a composite video out, allowing it to be connected to TVs. You will need a TV with direct video input, and if it is not NTSC capable, output will be in black and white. This great feature allows your camera to double up as a simple video camera as well as displaying previews of recorded images. Output to the TV oddly seems better than the final output quality, perhaps because of the smoothing effect of the slightly blurred TV image. This is a welcome feature – it certainly livened up a dull CU Amiga planning meeting when we found it worked with our video projector.

POWER DIGITAL CAMERA
Developer: Power Computing

System Requirements: OS 2.05 or better, 1 Mb Min, 68020 + 2Mb or better recommended

Ease of use — Hard to see how it could be much easier.	96%
Performance — Great software, great features, but very low image quality.	64%
Value for money — Great value.	94%

OVERALL
Easy to use, fun and very, very cheap – but results don't impress **81**

PD.net

PD.net

Dave Stroud unleashes another great assortment of Internet PD software utilities and games.

AmiFig 3.0

Type: Structured Graphics Tool

Available from: Aminet: gfx/edit/amifig30_68k.lha

Size:326K

Requirements: O.S. 3.0+

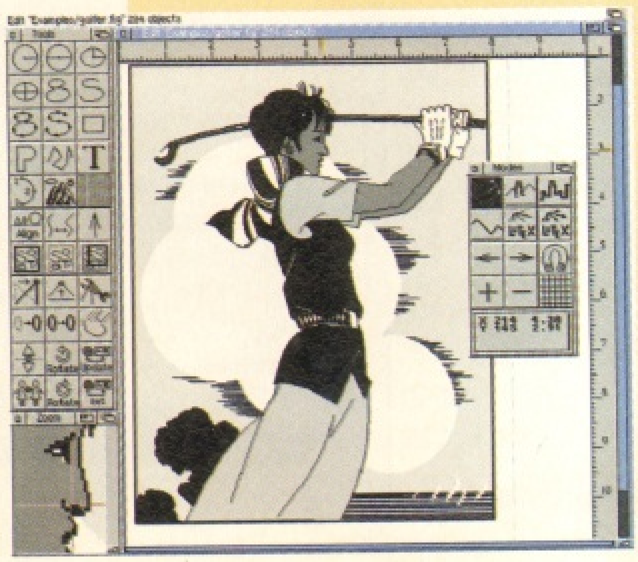
Download of the Month

Version 3 of this excellent structured graphics tool now supports the Xfig 3.2 file protocol, multiple paint windows and object alignment. Added to all the other features of this program, AmiFig continues to impress.

With all the drawing tools provided, you can create anything from simple line-drawings, through clipart, to complicated scientific diagrams. Let your imagination run wild! Oh, but this is a restricted demo version, which only saves out images composed of up to 30 objects.

For a very reasonable registration fee of US$ 20 or DM 30, however, you can unleash this program's full potential. The sky, as they say, is the limit. Well, almost. You'll probably need quite a lot of RAM to reach the sky.

As for the versatility of this program, well, there's not nearly enough room to do it justice here, so scoot on over to the CUCD/Magazine/InternetPD drawer on CUCD23 to check it out for yourselves. ★★★★★



Soliton 1.61b

Type: Card Game

Available from: http://www.uni-karlsruhe.de/~Kai.Nickel/soliton/soliton161b.lha

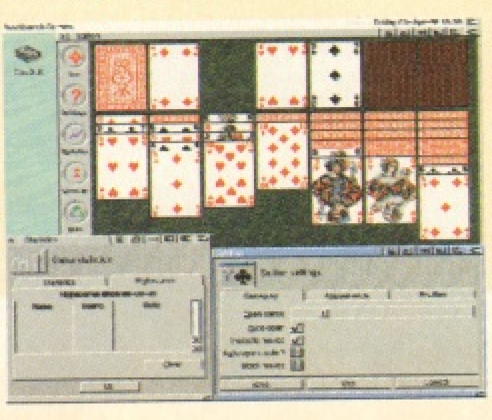
Size:263K

Requirements: Kickstart 3.0+, MUI 3.6+

It's a card game. More precisely, a patience card game. Much like Klondike, only it uses MUI and adds some extra little features like statistics, a timer and a move counter. Other aesthetic touches like animated card-turning and a selectable background pattern, not to mention those which MUI can give it, means that this is a very configurable game of patience. When all's said and done, it is only a game of patience, but it's a very good one. There are plenty of options to make the game as easy or as difficult as you'd like, including that of showing a "move" button when a move is possible (and if you can't see it yourself, clicking the "move" button will get the computer to do it for you).

You can define up to ten different "profiles" – combinations of cardsets and background patterns – to flick between at will. Creating your own cardsets can be done with any paint package – Soliton imports cards from a simple brush, and supports datatypes, so you don't need to convert images to a particular format. The archive also contains some scripts for ImageFX and Personal Paint to convert other cardsets like those used by Klondike to a format recognised by Soliton.

All in all, an excellent implementation of an old idea, and it's hard to see what could be added to Soliton to make it more appealing. After all, there's only so much you can ask for from a game of patience. ★★★★★



Circuit 1.2

Type: Circuit board simulator

From: Aminet: misc/sci/circuit.lha

Size: 67k

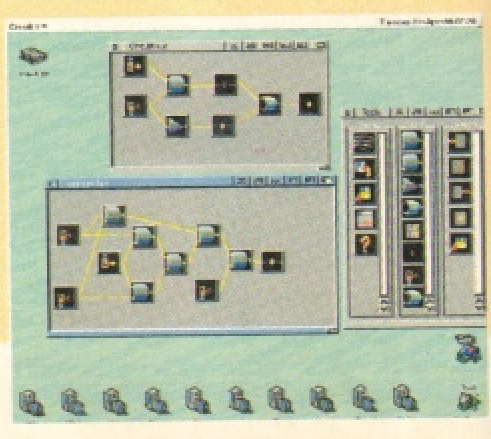
Requirements: Kickstart 3.0+, MUI 3.0+

Written in AmigaE by Maxime Gamboni, Circuit allows you to design and simulate circuit boards, and would therefore have come in very handy for my A-levels. Sorry Maxime, but you're a little late! Still, let's see what it can do.

Two windows are opened when you run Circuit for the first time; the main window and a project window, which acts as a blank canvas for designing your circuit. You do this by clicking and dragging an element in the second column of the main window to the project window. Do this with a couple of switches, a gate of your choice and a light bulb, and place them as you wish. Now all you have to do is link them up.

After reading the manual, you soon find out that this is done with the "bind" object (the first icon in the first column of the main window). Clicking this, followed by the output point of one element and the input of another wires the two elements together. Do this a couple of times, and you've got yourself a simple circuit.

I'm sure someone who would actually use this tool seriously would find it very useful – it has a lot of potential, but there's still plenty of room for improvement. The user interface could be made more intuitive, the manual could help by including an example tutorial to get you started (although there are a couple of example circuits included), and a print option would be a bonus for "debugging" your circuits on paper. ★★★



Splayer 1.9

Type: Sound Utility
From: http://www.oxford.net/~favers/files/splayer_v1.9.lha
Size : 114K
Requirements: Kickstart 3.0+, Play16 1.7+, Mpega 3.3+

SPlayer's main use is as a GUI frontend for Mpega and Play16 (both of which are available from Aminet). It doesn't use MUI, so it doesn't have the configurability of similar utilities, but as a plus point, doesn't require as many resources for a relatively simple tool.

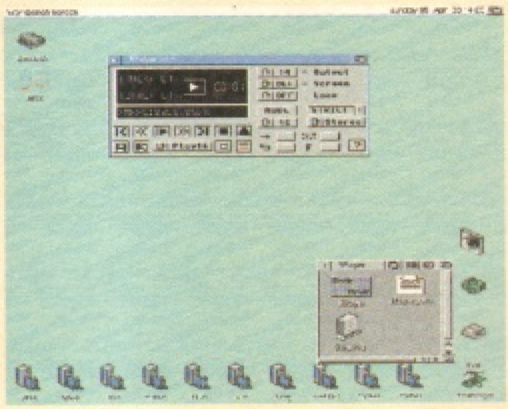
It can also be used from the CLI, and the documentation included in the archive contains information on how to set up SPlayer for use with Dopus, AWeb and IBrowse.

Its main use, however, is as a GUI. From the point of view of configurability, it isn't very. I absolutely loathe the Topaz font (what is it with Topaz this month, is it back in fashion?), and would stake my life on not being the only one to hope for a font-sensitive GUI in a future version.

The GUI window can be toggled between Play16 and Mpega modes, and controls plenty of features of both sound-playing utilities. The familiar "LCD" panel in the top left of the window is a tad on the large side, and, whilst the window isn't resizeable, you can iconify it if you wish.

There are several other features of SPlayer available from the menu, like AutoLoad and AutoPlay, and it can save out files too, so if you use it to scan a drawer-full of samples, you can save out only the ones you want to a different location.

I know the author doesn't want any "GadTools vs MUI" flame wars developing, but a font sensitive GUI of some sort would be a welcome change to the current Topaz offering. Otherwise, SPlayer appears to be a very competent little utility. ★★★★



Bloog v1.0

Type: Mailware
Available from: Aminet: game/think/Bloog.lha
Size:324K

Despite being another "push blocks around in a certain way to finish each level" puzzler, Bloog manages to be different enough to catch your attention. Alright, so the character you control – a green blob – is far from imaginative, but the gameplay makes up for this.

At the beginning of each level, various coloured blocks are scattered about a room, amid jewels and other items. The idea isn't to push them all into one place (thank heaven) but instead, to get rid of them, because they aren't of primary importance.

You need to collect a certain number of golden keys to complete each level. Sometimes, there are already a few of these scattered around the level which you can just pick up, but what do you do when there aren't any left?

This is where it gets interesting. The blocks which you can push around the screen are coloured either red, yellow or blue. Pushing a block into another of the same colour results in both blocks disappearing and being magically replaced by a key. Very nice.

To stand in your way are such traps as lava (which you can't normally walk over) and spikes (which you can never touch).

Other items like stars (which let you walk over lava), hearts (which act as a transportation device) and coloured squares (which change a block's colour) are there to help you, and to make things a little more tricky, the old favourite – squares you can only walk across in one direction – also make an appearance.

All these features are introduced to you gradually, and could make for some fiendish levels in the final game, which should be finished around the time you read this – all you have to do to get it is show your interest by emailing the author. I like Bloog, but still think it could be improved aesthetically, by getting rid of that pig-ugly Topaz font for a start.

Also, being able to quit the game and return to Workbench instantly (without having to go through the menu) would be nice. Keep up the good work, Marcus! I do look forward to seeing the final game. ★★★★

A bit on the side

With an increase in the number of files now residing on my hard disk (not to mention the need to buy another CD rack), I'm finding it increasingly difficult to remember where all those files are. A good job, then, that version 1.13 of Dirscanner was uploaded to Aminet recently (util/wb/DirScanner113.lha - 40k). It's also nice to see confirmation that Topaz/8 is, indeed, hated the world over, as the author names it as one of the reasons for using MUI to create DirScanner's font-sensitive GUI.

Continuing the cluster of MUI utilities is Address (biz/dbase/Address.lha - 60k). Like DirScanner, it does a simple job – this time of keeping track of all those names and addresses you can't be forgetting. It's not complicated, which is good, because I don't like it when things get complicated. Some user-definable fields and a configurable layout would be quite nice though.

For those of you who appreciate and take care of your RAM, another couple of memory-oriented utilities might be right up your street. First up is RadMan (disk/misc/radman.lha - 50k), which, despite sounding like a sound-bite from a cheesy eighties flick, is in fact a GUI for RAD disks. No folks, this one does not use MUI.

The other memory tool is ShowMem (util/moni/ShowMem.lha - 6k), which pops up a resizeable window on the Workbench screen showing you a colour-coded representation of your memory – what sort, how much is used, and how much is free. I told you I didn't like it when things got complicated.

Finally, speculation over phase5's pre/box has already started. Witness the first guess at its appearance – (pix/trace/PreBox.lha - 241k). Now, here's a little exercise: Cover up the bottom two-thirds of the picture (so you can't see the grill), get rid of the logo, imagine it's sprayed black, and tell me what you see. Anyone for a spot of housework?



PD.POST

PD.POST

For those without Internet access, here's Richard Drummond with a round-up of the latest PD available via mail order.

Impérial V2.66

Type: Puzzle game

Available from: Underground PD, 54 Carmania Close, Shoeburyness, Essex SS3 9YZ **Tel:** 01702 295887

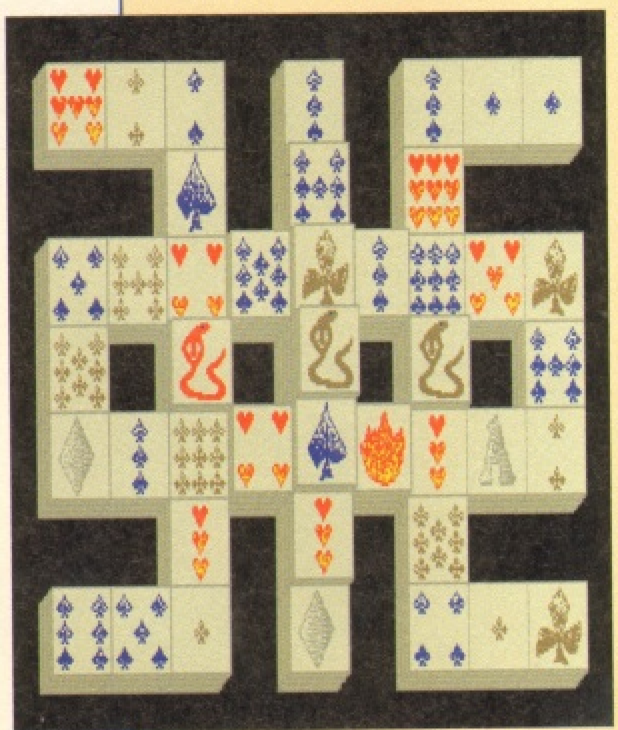
Price: £1.50

Disk of the Month

Impérial, by Jean-Marc Boursot, is a puzzle game based on the tiles from Mah-Jongg. The idea is to remove free pairs of tiles from the arrangement of tiles on the screen until none are left. A simple idea? Yes. But it is difficult and very addictive.

There are many similar games like this to be found, but, personally, Impérial is my favourite. It oozes atmosphere – with its oriental look and eery music – and it has a plethora of options to prevent it becoming a bit too repetitive:
6 different layouts, a layout editor, two player challenge mode, etc.

Impérial is polished, habit-forming and Workbench-friendly. If you have an earlier version, this new version doesn't offer much more. If you don't, get a copy now (and remember it's shareware). ★★★★★



M2I5

Type: Workbench utility

Available from: KEW=II Software, PO Box 672, South Croydon, Surrey CR2 9YS

Tel: 0181 657 1617 **E-mail:** kew=II@netcomuk.co.uk

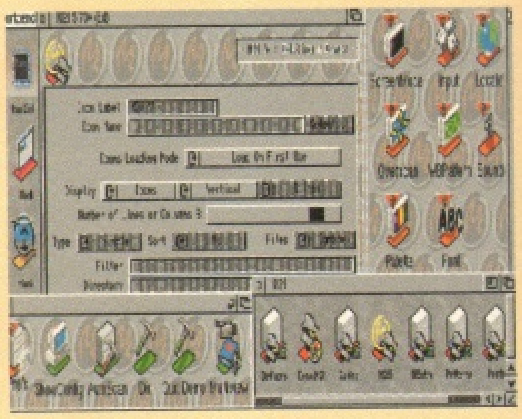
Price: £1.50

M2I5 is an applications and tools launcher for Workbench and, as such, is a contender for ToolManager 3.0's crown. Can this new blood aspire to better the long-standing champion?

M2I functions similarly to ToolManager. It creates strips or "docks" of button gadgets on the Workbench screen which can be clicked to launch applications or scripts. Icons can be dropped on buttons to pass arguments to an application. Tool Manager's Prefs editor is more powerful and easier to use since it uses MUI, but anybody out there who dislikes MUI may prefer M2I.

Where M2I really scores over ToolManager is the ability to use Icons in its docks rather than just text and/or images. This is visually appealing, especially if you have NewIcons installed. M2I does all the necessary colour remapping for you. Its other innovative feature is the ability to dynamically create docks by scanning for files in a particular drawer. For example, you could create a dock of all your Prefs programs by simply telling M2I to scan your Prefs drawer.

Overall, this an excellent utility - but I will remain loyal to ToolManger. ★★★★



Icon Poet

Type: Novelty

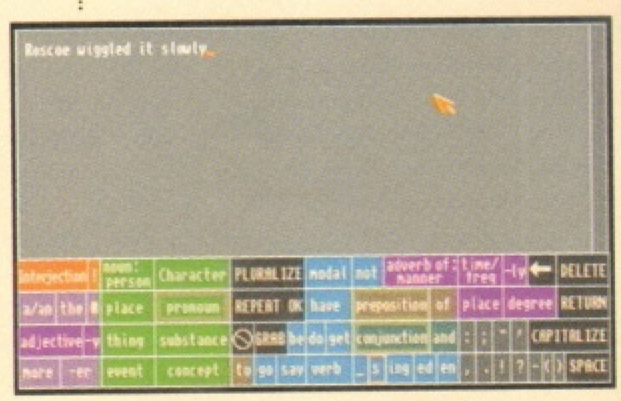
Available from: Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester, M26 2SH **Tel:** 0161 723 1638

Price: £1 plus 75p P&P per order

Icon Poet is, as the author Steve Tiffany claims, a creative writing toy. You supply it with a sentence structure by clicking on different grammatical terms and it produces corresponding words at random from its dictionary. A rather bizarre idea, you might think, and you would be right. But it does have some fun and novelty value.

The interface is rather clunky and non-standard, being written in AMOS, but it is functional and provides all the usual text editing controls. It also allows you to import and export ASCII files so that you can use Icon Poet to add some "creativity" to external and more staid documents.

This program does not have much practical use, but perhaps it may help to inspire authors suffering from the dreaded writers block? Who knows? Anyway, it is cleverly written and may provide half-an-hour's amusing diversion. ★★★



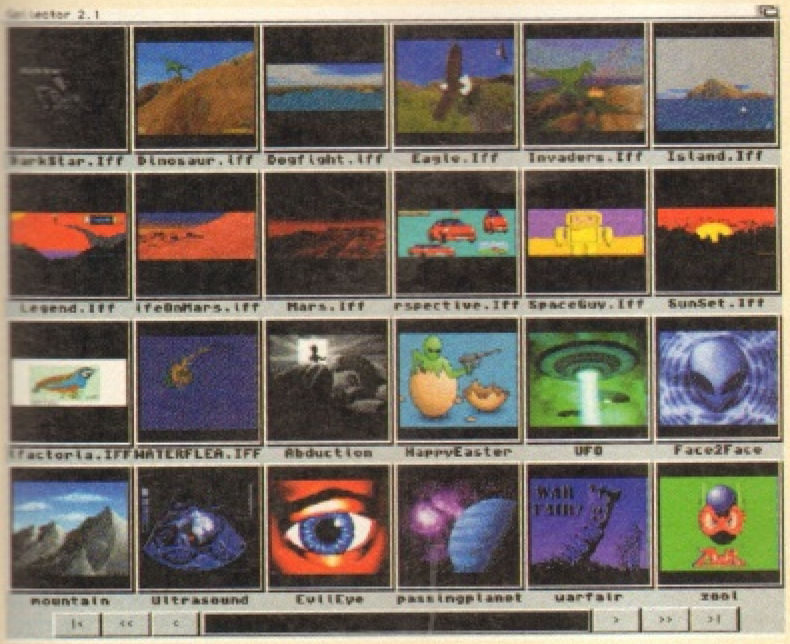
Collector 2.1

Type: Graphics utility
Available from: KEW=II Software, PO Box 672, South Croydon, Surrey CR2 9YS
Tel: 0181 657 1617
Price: £1.50

Collector is a utility for creating thumbnail indexes of your image collections. In this respect it does a similar job to commercial products such as Picture Manager Pro, albeit at £40 pounds cheaper. OK – it has no image processing or conversion facilities, but as "CreationWare" (if you like it, you send the author something you have created yourself) it is impressive.

You may have seen an earlier version of this program, and, if you have, then this version is still well worth a look. The author, Frédéric Calendini, has completely rewritten the program in C (from AMOS). It's now faster and more system-friendly and requires an AGA Amiga with Workbench 3.0+.

The program features a simple GUI with keyboard short-cuts and has many features and options to make the task of graphics cataloguing easier. It supports the creation of thumbnails in 16 or 256 colour grey-scale or 256 colours, the automatic scanning of directories, XPK compression, the creation of multi-volume indexes, and the saving of the indexes as IFF files. The only glaring omission is that it has no ARexx port.



Collector is no competition for its commercial counterparts, but does its job cheaply and well. There are newer versions of this program available, for example, on the Aminet, but this version is still very usable. Perhaps if you speak nicely to KEW=II Software they will supply you with the latest version. ★★★★

Telly Chubbies, Armchair Assassin AGA

Type: Game
Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester, M26 2SH
Tel: 0161 723 1638
Price: £1 plus 75p P&P per order.

The documentation for this game states, "The object of the game is to blast the stuffing out of as many of those EVIL T.V.Chubbies(tm) as your mouse hand can cope with." That says it all really.

This is an absurdly simple and pointless game. You control a cross-hair sight with the mouse and have to zap all the tiny "Chubbies" that are running about the screen. You do get a choice of weapon: shotgun, mini-gun or photon torpedo. But that's about it.



It would have been nice to have had this game before Christmas – it would have been the perfect relief from all the media frenzy about those pathetic TV Chubbies. However, as a game, it does not offer much. If you need five-minutes-worth of gratuitous violence, give it a go. ★★★

Class HD Utils #30

Type: Utilities collection
Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester, M26 2SH
Tel: 0161 723 1638
Price: £1 plus 75p P&P per order.

This is the 30th incarnation in this utility series and contains the same mixture of useful and novel software as its predecessors.

AllSystemsGo, which plays a sample of HAL-9000 from the film 2001 saying "All my systems are operational . . . ", is intended to go into your WBStartUp drawer. This, perhaps, does not come under the headings useful or utility, but nevertheless has some amusement value – at least for the first two or three times.

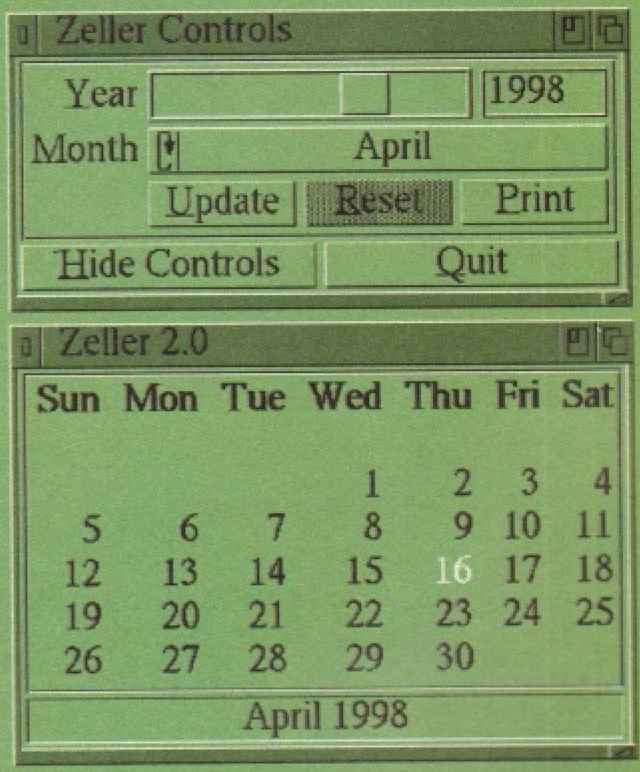
Keyboarder is a game to help you polish your typing skills. It consists simply of letters falling down the screen – which you must type as quickly as possible.

There are many similar programs to be found with more features, but this is quite a nice version.

Zeller is a perpetual calendar program based on the Zeller's Congruence algorithm. It can display a calendar of any month between the years AD1753 and AD2100. I'm not convinced that anybody will actually find a use for this, but at least this is one piece of software that will still be functioning in the next century.

There are a few other interesting odds and ends on this disk. For example, UnZip, a GUI for zip decompression; ADInlay for creating inlays for audio cassettes; a PhotoCD datatype; and a font cataloguer for the FinalWriter word processor.

Nothing on this disk is a 'must-have', but there is a wide selection of software here. For £1 this has to be good value for money. ★★★



Art Gallery

Are you a Digital Dali? Computer Carravagio? Send your pics to: Art Gallery, CU Amiga, 37-39 Mill Harbour, Isle of Dogs, London E14 9TZ.



See your work in print... and win a print, too!

Each month we will declare one picture in the Gallery to be picture of the month – and if it is yours, we will send you a print of your work output to an ultra high quality IRIS printer on glossy paper (that's around 25-30 quid from a print shop to you, guv') – you'll never see your work look so good!

If you want to enter a picture into Art Gallery, either email it to artgal@cu-amiga.co.uk or post in on disk to our normal address, marking the envelope Art Gallery. We recommend the use of PNG format as it saves a lot of disk space, but alternatively GIF or IFF are fine.

* 'JPeg' drops image quality so avoid where possible – also never use for images with 256 or fewer colours.



2



3



4



5

1. Train View by Auburn Thomas Hodgson
This piece was rendered in Cinema 4D, based on a sketch Auburn did on a train. The landscape through the window was photographed through a train window. The acid colours, as anyone who remembers Auburn's picture of a Beetle some months back will recall, are his/her (sorry, unisex name!) trademark. Reminds me of a journey through pollution stained Hungarian countryside a few years back. Dramatic, well composed, excellent colour sense. Send us more!

2. Dangerous Liasons by Steve Dukes
Steve's first render in Imagine. The models are from the Aminet, uploaded by Andrew Nun, but the idea is what makes it worthwhile. Steve says he is a fan of the "impossibly stupid Daleks" as well as dinosaurs, and thought the two would go well together. A great evocation of childhood obsessions – I certainly remember playground debates on whether Giant Haystacks could beat Judge Dredd or if Dracula could last three rounds with James Bond.

3. Last Man Standing by Cedric Moorhead
This pic was sent in by Cedric, who makes it clear in his letter he is an opinionated bastard. "I whipped this up in no time," he says, "because everything in your art gallery is so (expletive deleted) that I only needed 20 minutes to do better." He says he used to like the gallery but reckons that these days it is " full of (expletive deleted)s doing a bunch of (expletive deleted) on DPaint 2 they got with their A500." Cocky git, huh? He goes on to say that he did this picture in Art Effect ("great, but buggy as (expletive deleted") and Image FX ("the dog's testicles"), and reckons he's going to use Art Gallery to get his work printed on an IRIS once a month. Yeah, right. So what do you lot think – is he right, or is he just a little (expletive deleted)?

4. White Skies by Auburn Thomas Hodgson
Auburn gets two pics in this month by dint of supplying two very good ones. This one has scanned clouds and textures generated in Dpaint and Photogenics. The latter was used for the motion blur and the HUD overlay, too. The subject matter is a pretty cliched one, but the execution is original, in your face and very dynamic.

5. Spiced by Raymond Zachariasse
Raymond, you are a sick man. A solid piece of DPaint draughtsmanship demonstrating a real skill with the mouse and a real lack of musical taste. The likenesses are of variable quality (Baby spice looks scarier than Scary) but Spiced certainly earns a place in the Gallery on the basis that I can't resist skillfully hand drawn pieces.

User Groups

Let our international user-group directory put you in contact with other Amiga users in your local area.

To add a new group to the list, just fill in the form on the opposite page.

Amiga Christchurch Inc.
Location: Christchurch NewZealand
Contact: Annette Leonardo
Telephone: +64 03 3390232
Meeting times: Second Tuesday of every month 7:30 pm.
Places: Shirley Community Centre, Shirley Rd.
Address: ACI. PO Box 35-107, Christchurch, NZ

Amipack
Location: World Wide – An Amateur Radio Amiga Group
Contact: Paul Carson
Email: DJKus@CarsonJ.clara.net
Telephone: N/A
Meeting times: TBA
Places: On the Amateur Radio Packet Network.
Address: 10 Belgravia Avenue, Bangor, Co.Down, N.Ireland BT19 6XA

Waaslandia
Location: Belgium
Contact: Tony Mees
Email: waasland@glo.be
Telephone: +32 (0)3744 1319
WWW: http://titan.glo.be/~waasland
Meeting times: 12 meetings per year.
Places: We have 6 Amiga clubs in Belgium:- Antwerpen; Merksem; Aalst; Mechelen; Turnhout; St-Niklaas
Address: Lepelstraat 11, 9140 Steendorp Belgium

Wigan/West Lancs Amiga User Group
Location: Wigan/W Lancashire
Contact: Simon Brown/Ralph Twiss
Email: ssamiga@warp.co.uk
Telephone: Simon; 01257 402201 or Ralph; 01695 623865
WWW: www.warp.co.uk/~ssamiga
Meeting Places:St Thomas the Martyr School Hall, Highgate Road, Up Holland, Lancs
Address: 79 Woodnook Road, Appley Bridge, Wigan, WN6 9JR & 32 Higher Lane, Up Holland, West Lancs

Alpha Software
Location: Newcastle, UK
Contact: Gareth Murfin
Email: gazy@globalnet.co.uk
Telephone: 01670 715454
WWW: http://www.users.globalnet.co.uk/ ~gazy/
Meeting times: 8 - 9pm.
Places: IRC #AmIRC GalaxyNet
Address: Alpha Software. Gareth Murfin.113, Cateran Way, Collingwood Grange. Cramlington Northumberland. NE23 6EZ. UK.

Convergence International
Location: International
Contact: Ben Clarke
Email: enquiries@convergence.eu.org
Telephone: 0956 985959
WWW: www.convergence.eu.org
Meeting times: 8pm (GMT), Wednesdays and Sundays
Places: #converge (IRCnet)
Address: 49 St. Gilberts Road, Bourne, Lincs, United Kingdom

Amiga Club Genk (ACG)
Location: Genk, Belgium
Contact: Bart Vanhaeren
Email: amiga.club.genk@skynet.be
WWW: http://users.skynet.be/amiga/acg
Meeting times: every 1st Sunday of month
Places: Cultural Centre of Genk, meeting room 1
Address: Weg Naar Zwartberg 248 B-3660 OPGLABBEEK, BELGIUM

Relax ITC
Location: Poland
Contact: Shandor
Email: shandor1@polbox.com
Telephone: +48-91-357184
Meeting times: TBA
Places: unspecified
Address: ul.Maciejewicza 1/27 71004 Szczecin 10, Poland

National Capital Amiga User Group
Location: Washington D.C. USA
Contact: Fabian Jimenez
Contact by: Phone (please send us your phone number... Fabian)
Telephone: 301/924-0750 (10pm – 1am EST)
Meeting times: 12:00 noon EST
Places: Dolly Madison Library
Address: Fabian Jimenez, NCAUG PO Box 12360, Arlington, VA 22209 USA

Amiga World Special Interest Group
Location: Athens, Greece
Contact: Menis Malaxianakis
Telephone: 301 - 9026910/9012019
WWW: http://www.compulink.gr/amiga
Meeting times: 5pm Saturdays Places: Athens
Address: Menis Malaxianakis, Giannitson 11str. 17234, Dafni Athens. Greece

Amiga Forever!
Location: Hampshire
Contact: Stuart Keith
Telephone: 01703 861842 all day
Meeting times/places: TBA
Address: 101 Ewell Way, Totton, Southampton, Hants S040 3PQ

Mutual Amiga Computer Enthusiast
Location: Beresfield, Newcastle, Australia
Contact: Ken Woodward
Email: ken@rich.com.au
Telephone: after working hours
Meeting times: 7pm 1st & 3rd Wednesday of month
Places: Beresfield Bowling Club.
Address: 59 Carnley Avenue, New Lambton, Newcastle, NS Wales Australia

Kickstart, Surrey Amiga User Group
Location: Surrey
Contact: Rob Gilbert
Email: gilbie@arrakis.u-net.com
Telephone: 01932 875336
WWW: www.arrakis.u-net.com
Meeting times: Monthly (TBA)
Places: Vary
Address: 10 BRox Road, Ottershaw, Surrey. KT16 OHL

Canberra Amiga Users Society Inc
Location: Canberra, ACT, Australia
Contact: Alex Cameron (Secretary)
Telephone: (02) 6286 2966
WWW: http://www.spirit.net.au/~jamesm/CAUS/
Meeting times: 2nd Thursday of the month from 8pm.
Places: Woden Town Centre Library (Entry – The Elm Cafe).
Address: Canberra Amiga Users Society PO Box 596, Canberra ACT, 2601, Australia.

XCAD User
Location: N Ireland
Contact: Tony McGartland
Telephone: 01662 250320 (after 6pm)
Meeting Times/Places: TBA
Address: 11 Lammy Drive, Omagh, Co Tyrone BT78 5JB

ICPUG SE Computer Club
Location: Biggin Hill, Kent
Contact: Len Beard
Telephone: 01689 813 616
Meeting times: Thursdays 8-10pm
Places: Biggin Hill (phone for details).
Address: 56 Rookesly Rd, Orpington, Kent. BR5 4HJ

Colchester Amiga Forum
Location: Colchester, Essex
Contact: Patrick Mead
Telephone: 01206 212 864 (Mon-Fri
Email: pjmead@Hotmail
Meeting Times/Places: TBA
Address:9 Windmill Ct, Copford, Colchester, Essex. CO6 1LH

Luton Amiga Users Group
Location: Luton, Beds
Contact: Dave Noble
Telephone: 01582 750 538
Meeting Times/Places: Monthly TBA

Deal Amiga Club
Location: Deal, Kent
Contact: John Worthington
Telephone: 01304 367 992
Meeting times: 7pm Fridays.
Places: St John Ambulance Hall, Mill Hill, Deal, Kent.
Address: 100 Trinity Place, Deal, Kent

Amiga Service
Location: Charleroi, Belgium
Contact: Hoet Raphael
Telephone: 003271 458 244 (9am-6pm)
Meeting times/places: TBA
Address: Rue Du Nord 93, 6180 Courcelles, Belgium

Extreme Coders
Location: Sheffield
Contact: Mark Johnston
Telephone: N/A
Meeting Times/Places: Contact for details
Address: 1st Floor, 145 Upperthorpe Rd, Upperthorpe, Sheffield. S6 3EB

Stoke Amiga User Group
Location: Stoke on Trent, Staffs
Contact: Paul Shelley
Telephone: 01782 833 219
Meeting Times: 7.30pm Wednesdays
Places: Jester Public House, Biddulph Rd
Address: 19 Houldsworth Drive, Fegg Hayes, Stoke on Trent, Staffs. ST6 6TG

Amiga Falcons
Location: Malmo, Sweden
Contact: Carl-Johan Rudnert
Telephone: +46 40 932212
WWW: http://www.algonet.se/~mcisaac/amiga
Address: Amiga Falcons, c/o Carl-Johan Rudnert, Veberodsgatan 9, SE-212 28 Malmo SWEDEN

Finnish Amiga Users Group
Location: Finland
Contact: Janne Siren
WWW: http://batman.jytol.fi/~saku/
Address: Janne Siren Oravamaentie 2 F 17 02750 Espoo. FINLAND

Amiga Computer Enthusiasts of Elkhart, Indiana
Location: Northern Indiana, USA
Contact: Gregory Donner
Telephone: (219) 875-8593 (after 5pm)
WWW: www.cyberlinkinc.com/gdonner/ace.htm
Meeting times: Second Saturday of the month
Places: 26728 Hampton Woods Dr., Elkhart, IN 46514
Address: 60300 Pembrook Lane, Elkhart, IN 46517-9167. USA

Photogenics & ImageFX Users
Location: Stanford-Le-Hope, Essex
Contact: Spencer
Telephone: 01375 644614 (9am-9pm)
WWW: http://web.ukonline.co.uk/spencer.jarvis/contents.html
Meeting times/Places:TBA
Address: 44 Brampton close, Corringham Stanford-le-Hope, Essex. SS17 7NR

No Specific Name
Location: Greenford Community Centre, London
Contact: Richard Chapman
Telephone: 0181 998 8599 5pm-8pm week, all day at weekends
Meeting times: 7pm-10pm Thurs
Place: Greenford Community Centre
Address: 96 Meadvale Road, Ealing, London, W5 1NR.

AmyTech Amiga Users Group
Location: Dayton Area, Ohio. USA
Contact: John Feigleson
Telephone: (937)667-9541 After 6pm EST
WWW: www.coax.net/people/erics/Amitech.htm
Meeting time: 3rd Saturday of the month – 1:30pm
Places:Huber Heights Library
Address: AmyTech, P.O. Box 292684 Kettering, OH. 45429-0684

South West Amiga Group
Location: South West England
Contact: Andy Mills
Telephone: 01275 830703 (7-10.30pm weekdays, anytime week-ends (within reason))
WWW: http://www.wharne.u-
Meeting Times/Places: TBA (likely to be Bristol/Bath area)
Other: Please contact for further details
Address: 51 Wharnecliffe Gardens, Whitchurch, Bristol. BS14 9NF

Tuggerah Lakes Computer Users Group
Location: Central Coast, NSW. Australia
Contact: Darrell Keirnan
Meeting Times: 1st & 3rd Thursday of every Month
Places: Berkeley Vale Public School 7.00pm
Address: PO Box 659, Toukley. NSW. Australia 2263

Tasmanian Commodore Users Association Inc
Location: Hobart, Australia
Contact: Eric Fillisch
Telephone: (018) 120 787
Meeting times: 7:30-9:30pm, 3rd Wednesday of the month
Places: Contact for address
Address: GPO Box 673, Hobart GPO TAS 7001

University Place Commodore Home Users Group
Location: Tacoma, Washington USA
Contact: Jim McFarland
Telephone: (253) 265-3478 evenings
WWW: http://www.nwlink.com/~red-beard/upchug/
Meeting times: 4th Thursday evening of each month
Places: Fircrest Community Center, Tacoma, WA
Address: PO Box 11191, Tacoma, WA 98411-0191. USA

R.A.V.A.
Location: Alkmaar, the Netherlands
Contact: Roland de Herder
Telephone: Wanna call international? Ask me for my number.
WWW: http://www.cybercomm.nl/~macron/rava.html
Meeting times: 12 times a year
Places: Alkmaar
Address: R. de Herder, Ewislaan 35 1852 GM Heiloo, The Netherlands

Virus Help Team – Norway
Location: Norway
Contact: Helge Syre
Telephone: +4790175626
WWW: http://home.sol.no/~syre
Address: Roeyrvikvegen 40 N-4280 SKUDENESHAVN

CWCCC
Location: West Midlands
Contact: Luke Stowe
Telephone: 0966 467596 (after 10am)
WWW: None yet
Meeting times: 8pm-11pm
Places:Earlsdon Methodist Church
Address: 9 Trossachs Rd, Mount Nod, Coventry, CV5 7BJ

Amigart
Location: Istanbul
Contact: Guvenc KAPLAN
Telephone: 00902163020915
WWW: http://www.medyatext.com.tr/amigart
Meeting times: Two a month
Places: Anywhere
Address: Ortabahar sok. No:1 Hayat apt. d:2, 81080 Goztepe-Istanbul Turkey

Commodore Computer User Group Queensland
Location: Brisbane, Australia
Contact: Ronny Blake
Telephone: (07)32871790
WWW: http:www.powerup.com.au/~ rastlin
Meeting times:1st Tues of month, 7–9pm & 2nd Sun of month 12pm to 4pm
Places:St Laurence's College, 82 Stephens Rd, S Brisbane. Qld.
Address: 3 Conoble Court, Eagleby, Gold Coast, Queensland, 4207. Aust

Ayrshire Amiga Society
Location: Irvine, Ayrshire, Scotland
Contact: Maitland or Dale
Telephone: 01292 267959 or 01294 275535
Meeting times: Wednesdays
Places: Annick Community Centre, Irvine.
Address: 49 Belmont Road, Ayr Scotland. KA7 2PE

West London Computer Club
Location: West London
Contact: Alan Paynter
Telephone: 0181-932-1856
Meeting times:1st and 3rd Tues of month
Places: Duke Of York Public House
Address: 19 Harlech Tower, Park Rd East, Acton, London, W3 8TZ

Dublin Amiga Users Telephone Helpline
Location: Dublin, Ireland
Contact: Eddie McGrane
Telephone: +353-01-6235903
WWW: http://www.ireland.amiga.org/helpline.html
Meeting times: Anytime (24 hrs.)
Address: 27 St. Finians Green, Lucan, Co. Dublin, Eire

Central Arkansas Amiga Users Group
Location: Little Rock, Arkansas
Contact: Tim Grooms
Telephone: 501-851-7418
WWW: http://www.concentric.net/c aaug.html
Meeting Times/Places: Monthly TBA
Address: 14 Hickory Lane, Maumelle, AR 72113. USA

Stoneybridge BBS
Location: Dorset, UK.
Contact: Ozz
Telephone: 01202 679158 (10:30pm-6am GMT)
Address: 50 Junction Rd, Hamworthy, Poole, Dorset. (c/o NBI.UK.)

Amiga User Group of Western Australia
Location: Perth, Western Australia
Contact: Arthur Rutland
Telephone: 08 93641717
Meeting times: 2nd Tues of month at 7pm
Places:Curtin University
Address: 31 Chaffers St, Morley Western Australia, 6062

Amiga Computer Group
Location: Umeå, Sweden
Contact: Martin Sahlén
Telephone: +46-[0]90-24816 (24 hrs)
WWW: http://www.amiga-cg.se
Meeting times: Tuesdays 19:00
Places: Kafé Station, Umeå
Address: Skolgatan 14, SE-903 22 UMEÅ. Sweden

Huddersfield Amiga Users
Location: Huddersfield, W Yorks
Contact: Geoff Milnes
Telephone: 01484 543534
WWW: http://www.geemil.demon.co.uk
Meeting times: 7.30pm onwards
Places:Commercial Inn, Market St,Paddock Huddersfield.
Address: 6 Ochrewell Avenue, Deighton, Huddersfield, W Yorks.

Highland Amiga User Group
Location: Highlands, Scotland
Contact: Tommy MacDonald
Telephone: 01667 404757 Anytime
WWW: http://azone.prohosting.com
Meeting Times/Places: TBA
Address: 7 County Cottages, Piperhill, NAIRN, Scotland. IV12 5SE

Emerald
Location: Northern Ireland
Contact: Charles Barr or Chris McGonagle
Telephone: 01504 884700
WWW: http://www.geocities.com/SiliconValley/Park/7401
Meeting Times/Places: TBA
Address: 77 St Colmans Drive, Strabane, Co. Tyrone, N Ireland

Team Amiga
Location: Worldwide
Contact: Gary Peake
Telephone: 1 281 350 2194
WWW: http://www.wans.net/~gpeake/links.html
Meeting times: Daily
Places: All Nets and IRC
Address: 19723 Teller Blvd Spring, Texas USA 77388

Knox Computer Club
Location: Galesburg, IL. USA
Contact: Mitch Durdle
WWW: www.galesburg.net/~kcc
Meeting times: First Tuesday of Month 7pm
Places: 695 N Kellogg Galesburg, IL (in the auditorium)
Address: Knox Computer Club 1003 East Fifth Ave. Monmouth, IL 61462 USA

AmigaTCS
Location: Columbia Missouri
Contact: Terry Booher
Telephone: (573) 817 2948
WWW: coming soon!
Meeting times: 7pm 2nd tues of month
Places: TBA
Address: 115 West Phyllis Avenue Columbia MO, 65202 USA

South West Amiga Group – Sydney (SWAGS)
Location: Campbelltown, Sydney, Australia
Contact: Mark Vine
Telephone: (02)46311801 After 7pm
WWW: None yet
Meeting times: 7pm-10pm 2nd & 4th Wed of every month
Places: Airds Community Centre, Riverside Dr, Airds
Address: 11 Kennedy Grove, Appin, N.S.W. Australia 2560

Computer club Aktief
Location: Lelystad, the Netherlands
Contact: Ji Yong Dijkhuis
Telephone: +31(0)320 241741 (not after 23:00 CET)
WWW: http://mcs.nl/aktief/amiga/amiga.html
Meeting times: Every monday 19:30 till 23:00
Places: Buurthuis de Krakeling (same as the postal address)
Address: Computer Club Aktief p/a Buurthuis de Krakeling Fjord 155 8224 DJ Lelystad. The Netherlands

Send this form to: **User Groups; CU Amiga, 37-39 Milharbour, Isle of Dogs, London, E14 9TZ.**

Alternatively, fax it to: 0171 972 6755, or use the online version of the form which can be accessed from our website at: www.cu.amiga.co.uk This service is completely free of charge.

General Location: ____________________

Tel: ____________________

Postal Address: ____________________

____

____

Meeting Times/Places:

____

____

____

Group name: ____________________

Email: ____________________

Web site: ____________________

Contact name: ____________________

Preferred contact method.(please tick)

E-mail❑ **Phone**❑ **Post**❑

CU AMIGA MAGAZINE

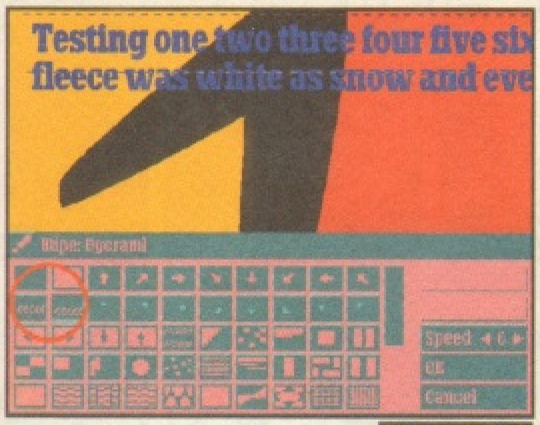
Amiga Workshop



The CU Amiga Workshop... read on for your guaranteed fast-trak to enlightenment and inner peace.



Personal Paint 6.6 p76



Scala MM300 p88



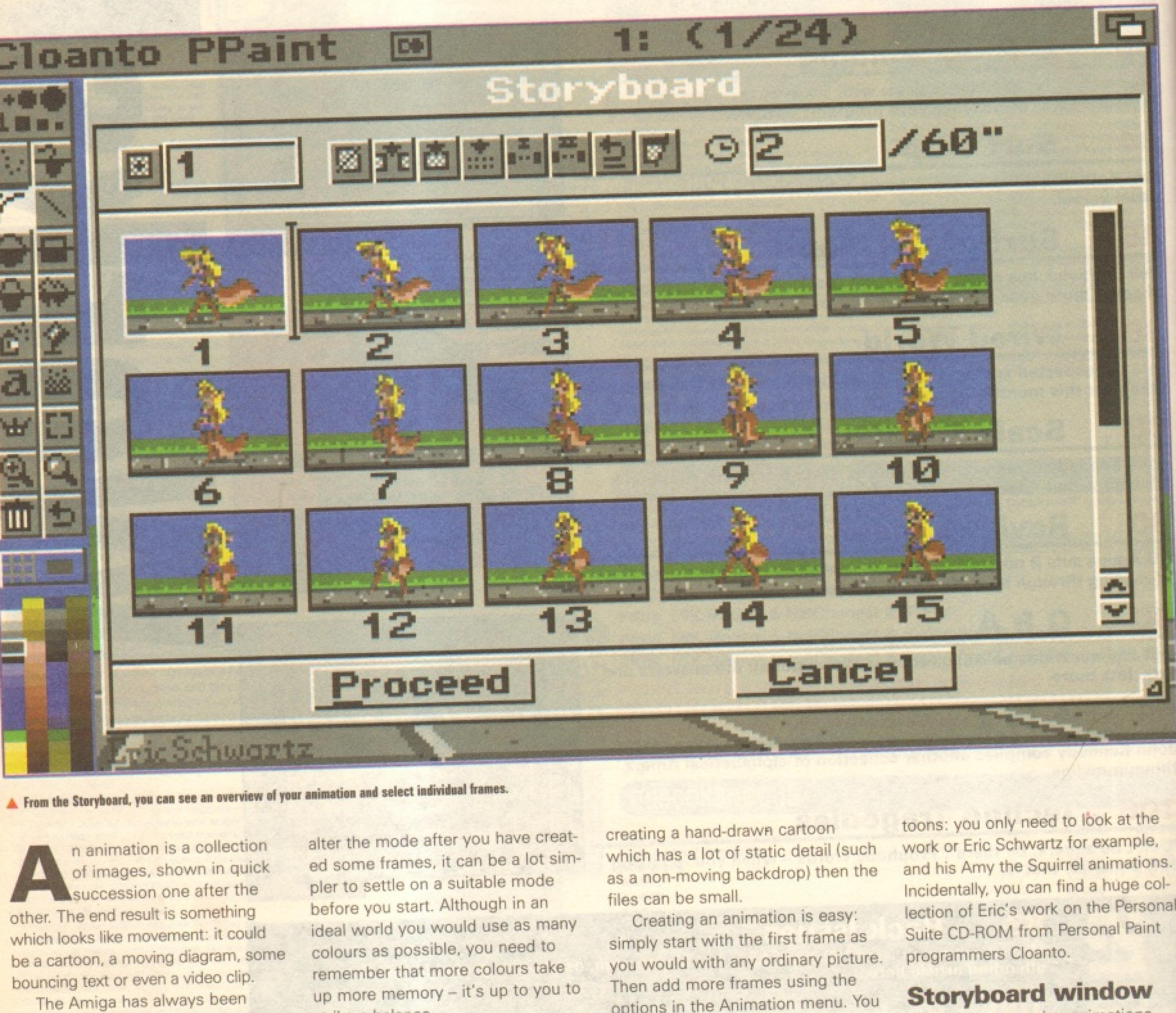
Techno Tragedy p106

Regulars

PART 5

Personal Paint

Bored with static images? In our final PPaint tutorial John Kennedy explains how to get the most from its powerful animation features.



▲ From the Storyboard, you can see an overview of your animation and select individual frames.

An animation is a collection of images, shown in quick succession one after the other. The end result is something which looks like movement: it could be a cartoon, a moving diagram, some bouncing text or even a video clip.

The Amiga has always been good at animation, and Personal Paint is one of the best tools for creating and editing these "anim" files, as they are known.

Making an animation with Personal Paint

Before you start your animation, it pays to spend some time deciding on the screen mode you want to use. Although Personal Paint can alter the mode after you have created some frames, it can be a lot simpler to settle on a suitable mode before you start. Although in an ideal world you would use as many colours as possible, you need to remember that more colours take up more memory – it's up to you to strike a balance.

It's almost impossible to predict how much memory a given animation will consume. As each frame is stored in terms of the differences between it and the previous frame, the size of the file will vary tremendously. If you are trying to make an animation using captured video clips for example, the file will be large. On the other hand, if you are creating a hand-drawn cartoon which has a lot of static detail (such as a non-moving backdrop) then the files can be small.

Creating an animation is easy: simply start with the first frame as you would with any ordinary picture. Then add more frames using the options in the Animation menu. You can then move to the new frame, make changes, move back to the original and so on. When you're happy, select Play from the menu and watch as the frames are displayed one after the other.

The large number of drawing tools and effects made available by Personal Paint means it is possible to draw very professional-looking cartoons: you only need to look at the work or Eric Schwartz for example, and his Amy the Squirrel animations. Incidentally, you can find a huge collection of Eric's work on the Personal Suite CD-ROM from Personal Paint programmers Cloanto.

Storyboard window

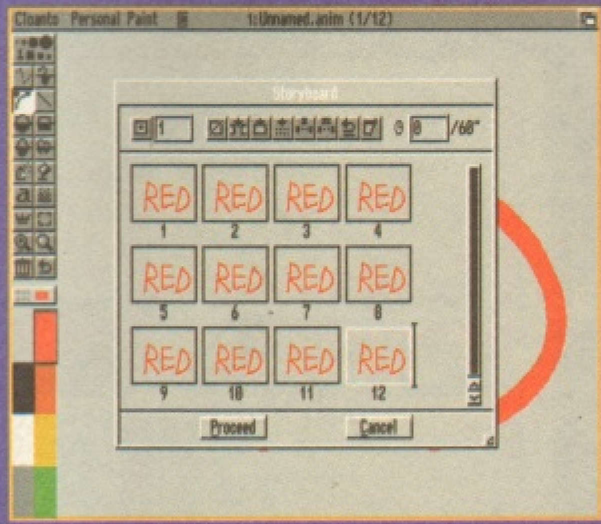
The key to managing animations with Personal Paint is the Storyboard window. This can be accessed from the Animation menu. It brings up a display which lists all the current frames in existence, along with their timing details. You can also right-click and drag to resize the windows which are used to represent the individual frames in the animation, and

Colour animation

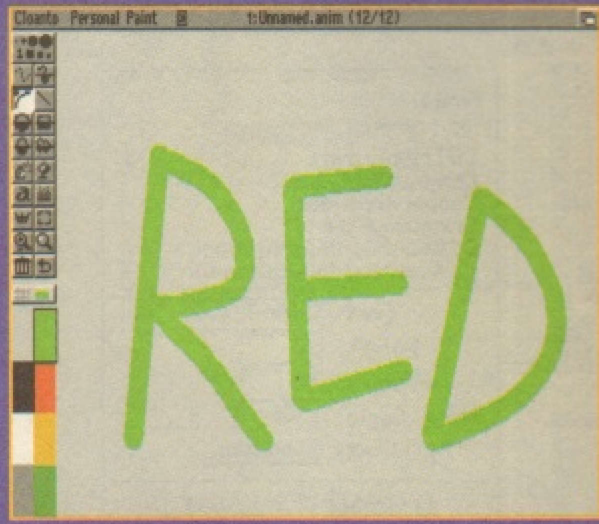
Another useful animation trick is to alter the colours. Personal Paint can store a separate palette per frame, which means you can reassign all the colours you need at any time. Not only does this mean you can use less colours overall (and so save memory and speed-up playback) but you can perform various tricks.



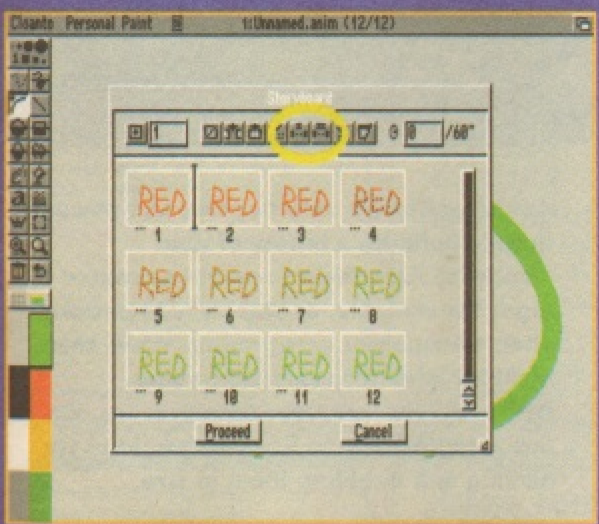
1. Here's an example. Start with a new project, using only a small number of colours. Pick a red brush and draw something bold on the screen.



2. Now open up the storyboard screen, and add more frames until you have about 12. The contents of the new frames will be copies of the first.



3. Go to the twelfth frame, and change the palette entry from red to green. Your on-screen drawing will change too.



4. Back to the Storyboard, and select all the frames in the animation. Click on either of the two blend tools in the Storyboard window, and watch as the previews change. Your colour will smooth change from red to green. Play back the animation to see it happen.

Scala

Don't forget that you should also have an excellent multimedia tool at your disposal for combining your animations with text, wipes, sound effects and even CD quality music. Yes, Scala and Personal Paint are a brilliant combination. Create your animations in Personal Paint, and then link them together in Scala for the final touch. Scala can replay animations direct from disk (if you don't have enough memory) and lay text on top. Why limit yourself to just one piece of software?



▲ Combine two great CU Amiga giveaways: Scala and Personal Paint. You've never had it so good!

so fit more frames into the window or see more detail in each.

From the Storyboard window you can add or delete frames, and control the display time for each one: the fraction of 60th displayed in the top right of the window will define how long in seconds the current frame will appear on the screen.

Top animation tips

Use the ARexx features:
Personal Paint can split an animation into individual frames, and recombine the frames into a single animation file. Use this to create files which are extra large, or to combine animations from different sources, such as a 3D program.

Use image processing:
The same Personal Paint ARexx scripts can process frame after frame automatically. You could use this approach to blur background frames, or change colours without re-drawing the entire animation.

Use as few colours as possible without compromising your anims:
When images are moving, you can afford to skimp on details. Stick to a few colours, and as a result you can have longer and faster animations. Timing is everything and Personal Paint allows individual timing per frame. Don't create fifty identical frames, create one frame which stays on-screen fifty times longer.

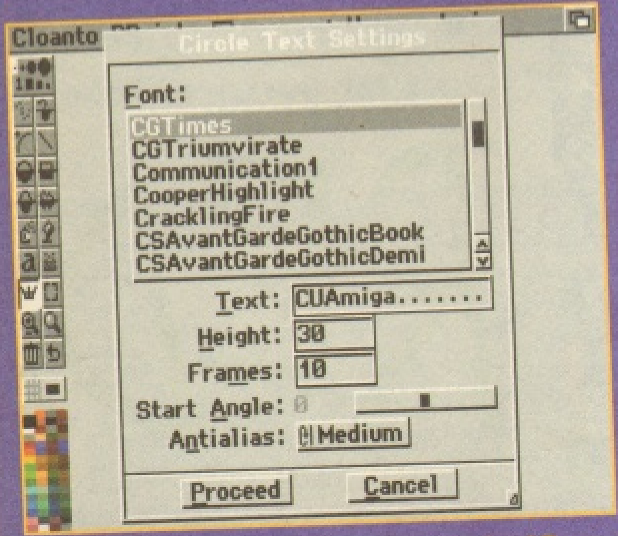
Use Optimise:
If you have a favourite animation, try loading it into Personal Paint and selection the Optimise option from the Animation menu. This will look through the file, detecting identical frames and replacing them with a single frame and suitable timing information. This can shrink the size of anim files created with other programs considerably – very useful.

Animation Hotkeys

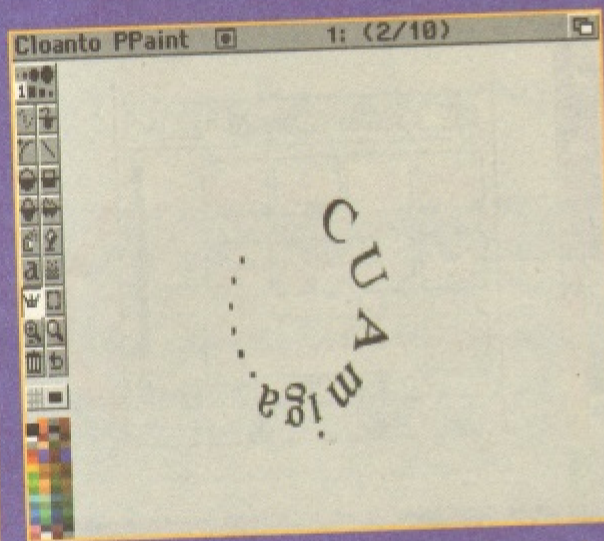
- 1 Previous frame
- 2 Next frame
- 3 Go to a specific frame
- 4 Play once
- 5 Play continuously
- 6 Play first in forward direction, then backwards
- Alt 1 AnimBrush previous frame
- Alt 2 AnimBrush next frame
- Alt 0 AnimBrush settings

Animbrushes

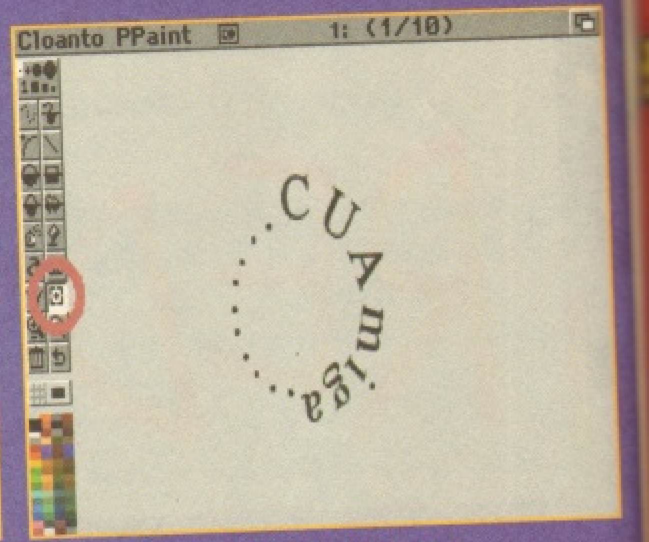
AnimBrushes are a combination of the standard cut-and-paint brushes which you've probably already use many times, and animation files. Think of an AnimBrush as a brush which can store many different patterns. AnimBrushes can be any size, but typically they are clipped from an existing animation, and so are usually smaller than full-screen. These multiple brushes are most useful when you want to paste something which moves into an existing animation. Here's an example.



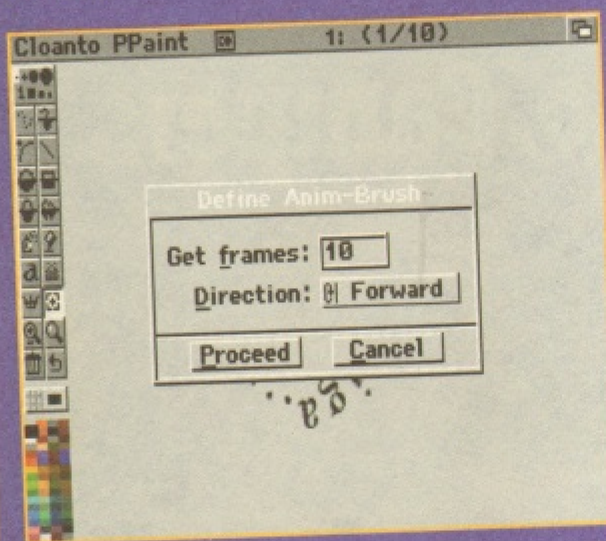
1. Starting with a blank project, use the ARexx tool to select the Circular Text option. Set the number of frames to 10, and this will automatically add frames as they are needed.



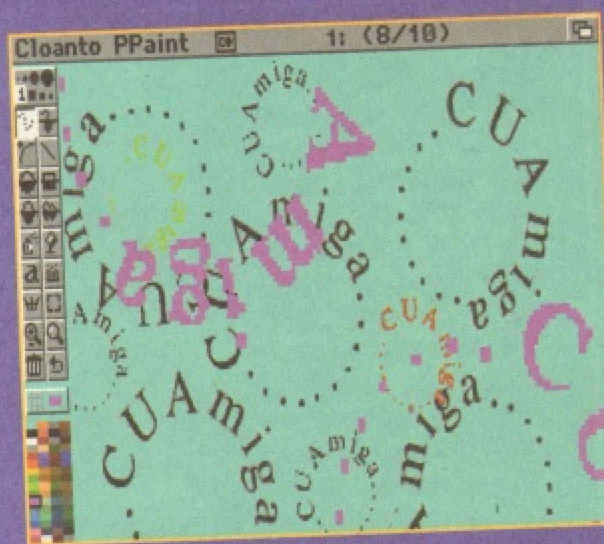
2. Define a small circle, and let the ARexx script do its thing. If you have a reasonably fast Amiga, make sure Anti-alias is switched on for best results.



3. Now clip out the animation as an AnimBrush. Make sure you are at frame 1, and then click on the brush cutting tool until it changes to the image shown. Drag it around the circling text as tightly as possible.

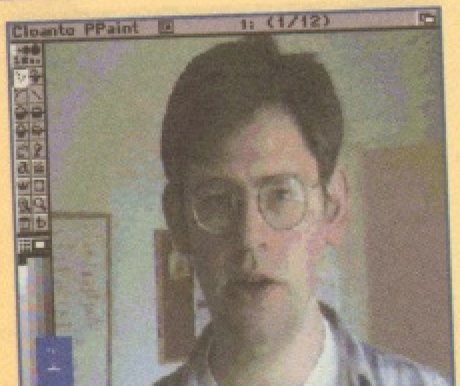


4. You'll be asked how many frames and in which direction should the brush be cut. The default values will do fine, so hit OK and the AnimBrush will be made. Now save it from the Animation/AnimBrush menu option.

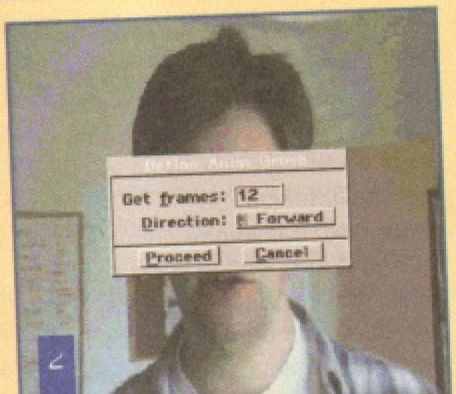


5. Now you can create a new animation, and stamp the AnimBrush down wherever you like. Each time you stamp the brush, it will move to the next design. By clicking and pressing 2 to move to the next frame, you can create your new animation very quickly.

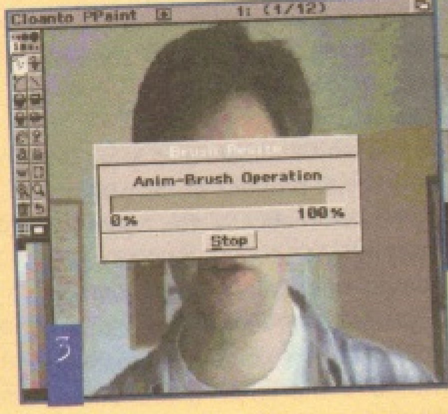
AnimBrushes are very flexible, and you can quickly build-up a library of your favourites. Use them to create animated logos for example, or star twinkle patterns. Their transparent backgrounds make them ideal for adding to existing images. Personal Paint can alter AnimBrushes like ordinary brushes, so don't be afraid to try halving and doubling them in size.



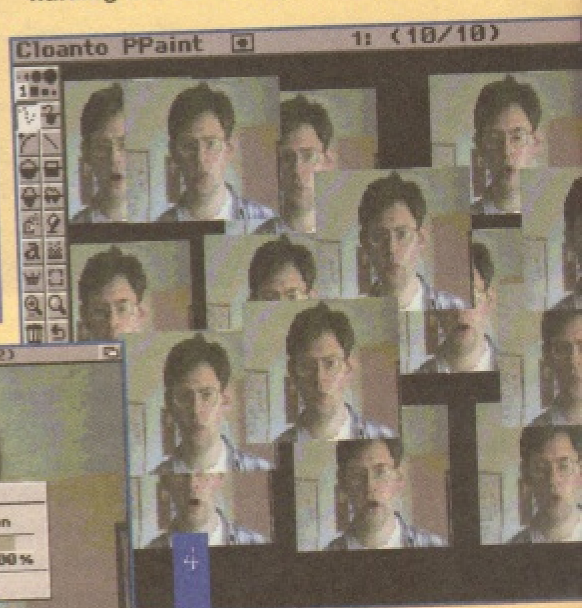
Here's how to take an ordinary full-screen animation and shrink it to a fraction of it's original size. First of all, load the animation as normal.



Now capture the animation as an AnimBrush as before. This time drag out the outline to cover the entire screen.



Use the Brush/Resize/Halve menu option. This process can take some time, depending on the number of frames, speed of your Amiga and so on.



Now create a new animation, and cut and paste the smaller AnimBrush over the screen. Use Alt-1 and Alt-2 to make sure each instance of the AnimBrush animation starts playing at a different frame. The result is a great pop video effect.

Visit us on the Web! - http://www.firstcom.demon.co.uk/

Open Late Wednesday & Thursday 9:30am until 7:30pm

Open Sunday 11am to 4pm

FIRST COMPUTERS

DELIVERY COSTS
- 2-4 Week Days £5
- Next Week Day £7
- Saturday Delivery £15

Delivery per order, not per item. Subject to availability

Tel: 0113 231 9444

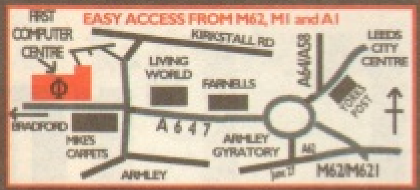
Fax: 0113 231 9191 BBS: 0113 231 1422

E-Mail: Sales@firstcom.demon.co.uk

Showroom Address:
Dept. CU, Unit 3, Armley Park Court
Stanningley Road, Leeds. LS12 2AE

Please allow five working days for cheque clearance. Prices are correct at the time of going to press. Please check latest prices before ordering. All sales are subject to our standard terms and conditions of sale. Copy available upon request. E&OE. Dated 15/04/98

SWITCH VISA DELTA MasterCard Lombard Finance



AUTHORISED REPAIR CENTRE



Our in-house engineers can offer you a no-obligation FREE estmate of repair on your Amiga or any computer peripheral. A delivery tariff of just £5 is charged or alternatively, visit our large showroom. We can also arrange for your items to be collected by courier for an additional charge of £11

Amiga Computers

Amiga Magic Packs

New Prices!

Includes Wordworth V4SE, Datastore, Organiser, Turbocalc 3.5, Personal Paint V6.4, Photogenix 1.2SE, Pinball Mania, & Whizz.



A1200 - 2Mb RAM No HD	£199.99
A1200 - 10Mb RAM 170Mb HD	£299.99
A1200 - 68030/40MHz 18Mb RAM 170Mb HD	£349.99
A1200 - 68030/40MHz 18Mb RAM 540Mb HD	£399.99
*A1200 - 68030/40MHz CPU 34Mb RAM 1.4Gb HD	£529.99
*A1200 - 68060/50MHz CPU 34Mb RAM 2.1Gb HD	£719.99

* Indicated machines come with a 200W Heavy Duty Prima PSU As Standard

Monitors

Lower Price!



MICROVITEC 1438/1402 14" Multisync only £250

MICROVITEC 1701 17" Multisync only £399



CD-ROM & I/O



easy CDROM Drive
- 8 Speed PCMCIA IDE CDROM
- Full Manual & UK Power Supply
- Full Software Drivers/CD32 Emulation
- Includes Audio Cable & Prima CD

Only £119

24 Speed versions are also available at £139. Anything faster than 8x speed requires at least a 68030 accelerated Amiga

SCSI External 2x CD-ROM £79
Includes Squirrel Int. & Cables. Also Chaos Engine CDROM

Internal SCSI CD-ROM Drives

Panasonic 4x Speed	£49
Philips 8x Speed	£59
Toshiba 32x Speed	£98

Power Tower



- Includes 200 Watt PSU
- PC Keyboard & interface
- Floppy Drive Facia & Cable
- Screws, port labels, & mains lead

Only £149

Zorro (5 PCI, 2 ISA, 2 Video Slots Option)	£169
Zorro III (5 PCI, 2 ISA, Video option, A4000 CPU Slot)	£359
PCMCIA "V" Adapter	£30
External Audio Port (for Internal CDROM)	£16
Internal SCSI Zip (inc. 100mb Cart & Amiga Zip Tools)	£140
4 Way Buffered IDE Interface (inc. IDEfix97 S/W)	£35

Please see below for IDE & SCSI Adapters, etc

Squirrel SCSI

Squirrel SCSI PCMCIA Interface (For A600/A1200. Only £45 with any SCSI Device)	£55
Surf Squirrel SCSI PCMCIA (For A600/A1200. Includes fast serial. £80 with any SCSI Device)	£99
4008+ SCSI Interface (For A1500/A2000/A4000. Up to 8mb memory on board using 30 pin SIMMS)	£100

Hard Drives

2.5" IDE Hard Drives

Includes installation software, screws, and instructions. For A600/A1200 machines

60Mb	£49	540Mb	£109
80Mb	£59	810Mb	£129
120Mb	£69	1440Mb	£159
210Mb	£89	2100Mb	£179

Special Purchase!
6.5Gb Quantum Cyclone
5.25" Fast ATA2 IDE Hard Drive
Features exceptional sequential performance making it ideal for video and multimedia. Will fit in a standard 5.25"bay with no additional mounting kit needed. Full 3 year warranty.
Only £163

3.5" Bare Hard Drives

IDE		SCSI	
2.1Gb	£117	1.0Gb	£100
2.6Gb	£134	2.1Gb	£199
3.2Gb	£145	3.2Gb	£240
4.3Gb	£154	4.3Gb	£286
6.4Gb	£206	9.1Gb	£899

A1200 4-Way Buffered IDE Interface £35
Includes Registered Atapi IDE-Fix 97 Software

3.5" IDE Hard Drive Install Kit
Includes set-up software, cables and full instructions. For A600/A1200. See above for Hard Drive prices
Only £19

Software

Aura 8 Bit Sampler	£30
Blitz Basic v2.1	£20
Cinema 4D V3	£150
Clarity 16	£96
Directory Opus 5.6 Magellan	£46
DiskMAGIC File & Disk Manager	£35
Final Calc	£95
G.P.Fax - Generic Class 1&2	£43
Hi-Soft Basic 2	£50
Hi-Speed Pascal	£65
IBrowse (Hi-Soft)	£25
Maxon Magic	£24
Megalosound	£28
Mini Office	£30
Money Matters 4	£39
Net & Web (Hi-Soft)	£30
Net & Web 2 (Hi-Soft)	£60
Net Connect V2	£50
Network PC (Weird Science)	£18
PCX-86 Emulator	£50
PC Task	£69
Personal Paint 7.0	£50
Power Scan Software (Epson Flatbed)	£50
Pro Midi Interface	£20
Secal Programming	£30
Studio 2 Professional	*£50
SurfWare Internet Software	£10
TechnoSound Turbo II Pro	£30
Termite TCP (Hi-Soft)	£45
Termite (Hi-Soft)	£30
TurboCalc 4.0	£50
Turbo Print 6	£40
Upper Disk Tools (Hi-Soft)	£11
Vista Pro 3 Lite	£5
Whippet (Amiga PCMCIA High Speed Serial Port)	£49
Wordworth 7 3.5" Version.	£40
WB 3.1 OS (State Amiga Model When Ordering)	£45
Zip/Jazz Tools	£17

*£5.00 off when purchased with a printer

CD-ROM Software

Prima Shareware CD-ROM only £2 with any CD-ROM purchase

Delivery £2 per title, or £5 for 3 titles or more

LSD & 17Bit Vol 1,2 or 3	£18	Epic Collection 3	£18	Mods Anthology	£24
3000 JPEG Textures	£9	Epic Interactive Enc.1997	£10	Movie Maker Special FX1	£18
3D CD 2 Images	£9	Eric Shwartz Animations	£17	Multimedia Backdrops	£15
AGA Experience 2 (NFA)	£9	Euro CD Volume 1	£12	Myst	£30
AGA Experience 3 (NFA)	£14	Euro CD Volume 2	£12	Network 2	£13
AGA Toolkit '97	£9	Flyin' High	£24	Octamed Sound Studio	£20
Amiga Desktop Video 2	£13	Fontamania	£10	One Escapee	£25
Amiga Developers	£13	Geek Gadgets 1 or 2	£13	Personal Suite	£18
Amiga Repair Kit	£35	Genetic Species	£29	Personal Paint 7.1	£23
Aminet 18,19,20,21, or 22	£11	Graphics Sensations 1	£18	p.OS (Pre-Release)	£18
Aminet Set 1, 2, or 3	£16	Giga Graphics (4CD)	£10	Prima Shareware	£5
Aminet Set 4 or 5	£27	Global Amiga Experience	£15	Quake	£30
Amy Resource Europe	£15	Gloom 3 Ultimate Gloom	£15	Retro Gold	£10
Animation (Weird Science)	£9	Golden Demos	£15	Scene Storm	£10
Arcade Classics Plus	£13	Guinness Disc Of Records	£18	Sci-fi Sensation 2	£18
Artworx	£9	Hidden Truth	£24	Sound & Graphics	£18
Assassins 3	£14	Illusions In 3D	£9	Sounds Terrific/Octamed 6	£18
Big Red Adventure	£18	Imagine PD 3D	£15	Speccy '97	£15
C64 Sensations Vol.2	£17	Insight Dinosaurs	£5	System Booster	£18
CAM (2CD)	£22	Into-The-Net	£15	Time & Reckoning	£18
Card Games PC/Amiga	£15	Kara Collection	£10	Trapped 2	£20
Civilization	£16	The Learning Curve	£18	UPD Gold	£13
Weird Science ClipArt	£9	Light ROM 4	£19	Uropa2 - Ulterior Colony	£25
Deluxe Paint 5	£20	Light ROM 5 (3CD)	£24	Utilities Experience	£14
Dem Rom	£9	Light ROM Gold	£14	1078 Weird Textures	£13
Doom 2	£15	Magic Publisher	£30	Wordworth 7.0	£40
Emulators Unlimited	£17	Magic W/Bench Enhancer	£9	Wordworth Office	£48
Encounters	£13	Meeting Pearls 4	£9	Workbench Add-ons	£21
Encyc. Of The Paranormal	£18	Miami	£28	Zoom 2	£19

Part Exchange

Money off your new hardware purchases!
Call for pricing now to part exchange your old items, and get real value for your unwanted monitors, printers, memory, computers, etc.

Second User Bargains Available Now!
Totally refurbished units, with a three month minimum warranty. Call for current stocks. For example:
Amiga A500+ Packs £60!

Please note, we do not buy items for cash. Goods can only be exchanged against a more expensive purchase.

Power Units

PRIMA ATOM HEAVY DUTY PSU



- High Quality 200 Watt PSU
- Colour Co-Ordinated Casing
- 4 Times Standard Power

Now Only £55

Standard Amiga PSU £25

Memory / Acc.

Prima A1200 4Mb RAM	£55
Prima A1200 8Mb RAM	£65

Includes Battery Backed Clock.Add £25 For 33MHz Co-Pro



1Mb 30 Pin (1*9) 70ns SIMM	£7
4Mb 30 Pin (1*9) 70ns SIMM	£10
4Mb 72 Pin (1*32) 60ns SIMM	£9
8Mb 72 Pin (2*32) 60ns SIMM	£13
16Mb 72 Pin (4*32) 60ns SIMM	£31
256 x 4 DRAM (DIL Type) (each)	£5
Prima A500 512k RAM No Clock	£17
Prima A500+ 1Mb RAM	£25
Prima A600 1Mb RAM No Clock	£25

Amiga Accelerator Cards

A1200 Blizzard 1260-50MHz	£320
A1200 Blizzard SCSI Module	£60
A1200 Viper II 68030 40MHz	£85
A1200 Magnum 68030 40MHz	£85
A500/+ Viper 520CD 68020 33MHz 8Mb	£99
A600 Viper 630 33MHz With FPU	£75

All the above A1200 boards are PCMCIA compatible

Storage



iomega Zip Drive **Only £135**
- Includes One 100mb Cartridge
- Fast SCSI Interface Version
- Includes Cable & Amiga Zip Tools

Zip Drive 100mb Media (each)	£10
Squirrel to Zip Adapter	£18

A SCSI Interface may be required at an extra cost. See Squirrel section on this page, above right.

A500/A500+ Internal Drive	£25
A600/A1200 Internal Drive	£25
A4000 Internal Drive	£65
Golden Image External Drive	£42

WIZARD SATURN
External 1Mb Floppy Drive for all Amigas
Only £39
Free Dir. Opus 4.12!

Graphics

Scanners

Power Hand Scanner Mono (256 greyscale on AGA Amigas. 64 Greyscale on others.)	£65
Epson GT5000 Flatbed Scanner (2400 DPI Output. 24 Bit Colour. Requires Software Below)	£209
Epson GT8500 Flatbed Scanner (3200 DPI Output. 32 Bit Colour. Requires Software Below)	£400
Amiga Epson Scanning Pack (Includes Full Image Scanning Software & Required Cable)	£50

Genlocks

Lola L-1000 Genlock (Mix video & graphics with ease, supports AGA as standard)	£115
Lola L-1500 Genlock (Composite video out. 2 Sliders, 1 fade to black)	£175
Lola L-2000 Genlock (Hi-8/YC input/output, includes dissolve & fade sliders)	£350

Pro-GRAB SVHS 24RT Plus
- 24 Bit Colour Realtime Digitiser
- Easy Set-Up With Full Software

Only £99

Pro-Grab 24RT PCMCIA Adapter £30

Modems

DIAMOND MULTIMEDIA SupraExpress

SupraExpress 56 Voice



- BABT & CE Approved
- Voice Capabilities
- 56,000 Data
- 14,000 Fax
- 5 Year Warranty

Only £100

SupraExpress 36 Voice



- BABT & CE Approved
- Voice Capabilities
- 36,600 Data
- 14,000 Fax
- 5 Year Warranty

Only £62

Amiga Surfware Internet Pack
The Complete Software Suite For All Your Internet Needs. Includes 30 days FREE Internet Access, excluding local call charges
Only £10 Or Just £6 With Any Modem

Miscellaneous

Zydec ZyFi Speakers



ZyFi 2
64 Watt PMPO
Mains Powered
Only £25

ZyFi 2 Pro
120 Watt PMPO
Mains Powered
Only £43

ZyFi To Amiga Cable	£5

Chip Upgrades

68882 Co-Pro 33MHz PLCC	£25
68882 Co-Pro 50MHz PGA	£35
Agnus 2Mb 8375-16 (A500+)	£28
CIA 8520 I/O Controller	£19
Kickstart 2.04/2.05 ROM Chip	£25

Miscellaneous

A520 TV Modulator	£35
Zipstick Super Pro Joystick	£13
Wizard 560DPI Mouse	£13
Quality Mousemat (4mm)	£2
3.5" Floppy Drive Head Cleaner	£2
80 Cap. Banx Lockable Disk Box	£10

Printers

Free printer drivers supplied where possible. Some printers require additional software. See software section above for discounted prices. Please contact us for full details.

All our printers include a free data cable worth £5!

Canon

BJC-30 Colour Inkjet (720 x 360 DPI Mono Printer. 30 Page ASF Built-In)	£159
BJC-80 Colour Inkjet (720 x 360 DPI Colour Printer. 30 Page ASF Built-In)	£189
BJC-250 Colour Inkjet (720 x 360 DPI. Mono & Col. Carts Supplied. 80 Page ASF)	£100
BJC-4300 Colour Inkjet (720 x 360 DPI. Optional Colour Scanner Cart. 5ppm Mono)	£132
BJC-4650 Colour Inkjet (720 x 720 DPI. Up to A3 Colour Printing. Dual Cart Printing)	£265
BJC-620 Colour Inkjet (720 x 720 DPI. Four Separate Cartridge Colour Printing)	£222

CITIZEN Computer Printers

ABC 24 Pin Dot Matrix Printer (300 DPI by 300 DPI. 50 ASF Built-In.)	£109
ABC Tractor Feed Unit	£35
Printiva 700C (600 DPI Colour, 1200 DPI Mono. Advance Micro Dry Tech.)	£292

EPSON

Stylus 400 Colour Inkjet (720 x 720 DPI. 4ppm Black, 3ppm Colour. 100 Sheet ASF)	£134
Stylus 600 Colour Inkjet (1440 x 720 DPI. 6ppm Black, 4ppm Colour. 100 Sheet ASF)	£185
Stylus 800 Colour Inkjet (1440 x 720 DPI. 8ppm Black, 7ppm Colour. 100 Sheet ASF)	£265

HEWLETT PACKARD

HP-340C Portable Colour (600 x 300 DPI Mono, 300 x 300 DPI Colour. 2ppm Mono)	£180
HP-400L Colour (600 x 300 DPI Mono, 300 x 300 DPI Col.)	£110
HP-690C Plus Colour (300 x 300 DPI Colour Printing. Now Even Faster.)	£192
HP-870CXI Colour (600 x 600 DPI Mono, To 8PPM, 600x300 Colour To 4PPM)	£256
HP-6L Mono Laser (600 DPI, 1Mb RAM, 6 Pages Per Minute Printing)	£279

Dual Parallel Printer Swtchbox £13
Includes cable. Other types & specifications also available

Cables

This is only a small selection. Please call.

23 Pin To 15 Pin Multisync Adapter	£7
9 Pin Mouse/Joystick Extension	£5
Mouse/Joystick Switcher	£14
Surge Protector 4 Plug Adap.	£15
Parallel Printer Cable 1.8M	£5
Parallel Printer Cable 4.5M	£12
Parallel Printer Cable 10M	£20
Parallel Bi-Di Printer Cable 1.8M	£5
Parnet Cable 25 Pin D Type	£15
Null Modem Cable 25DF-25DF	£10
Modem Cable 25DF-25DM	£10
RGB 9 Pin Monitor Cable Extension	£15
Multisync Monitor Cable Ext.	£12
1438 23 Pin To 15 Pin D Adap.	£10
Amiga To Scart Cable (CM8833 Mk1)	£10
9 Pin Extension Cable 3M	£7
Amiga to Philips 8833Mk II	£10
25D To Centronics Male	£12
Centronics Male To Female 1M	£15
Centronics Male To Male 1M	£15
SCSI 3 Device Internal Cable	£14
SCSI 7 Device Internal Cable	£17
Micro D Male To Micro D Male	£33
Micro D Male To Centronics Male	£33
25D To Centronics Female	£18
Internal 50 Way SCSI To External	£13
Amiga A600/A1200 2.5" IDE Cable	£10
Dual 3.5" IDE Cable	£10
A600/A1200 2.5" To 3.5" Cable Set	£20

Consumables

Delivery just £2 on small items under £20

Canon

BC01 BJ10/SJ48 Black	£17
BC02 BJ200 Black	£18
BC05 BJC210 Black	£20
BC06K BJC240 Photo Kit	£26
BC06 BJC240 Photo Cart	£20
BC09F BJC240 Fluores.	£26
BC10 BJ30 Head & Ink	£30
BC11 BJ70 Heat & Cart	£32
BC20 BJ4x00 Head&Black	£32
BC21 BJ4000 Head + Inks	£35
BC22 BJC4200 Photo Cart	£27
BC22K BJC4200 Photo Kit	£37
BC29F BJC4200 Fluores.	£32
BCI10 BJ30 Black 3 Pack	£11
BCI11BK BJ70 Black 3 Pk	£9
BCI11C BJ70 Colour 3 Pk	£15
BCI21BK BJC4000 Black	£5
BCI21C BJC4000 Colour	£14
BJI20B BJC6x0 Black	£5
BJI20C BJC6x0 Cyan	£6
BJI20M BJC6x0 Magenta	£6
BJI20Y BJC6x0 Yellow	£6
BJI642 BJ300/330 Black	£11

Refills/Re-Inks

Re-Ink Ribbon Spray	£10
Black Ink Cart Refill 50ml	£8
3 Colour Ink Refill 75ml	£13

Citizen

ABC/Swift Mono Ribbon	£5
ABC/Swift Colour Ribbon	£13
Projet IIc Colour Cart.	£30
Projet IIc Mono Twin Pack	£7
Project IIc Mono + Head	£22
Printiva Black	£6
Printiva Cyan	£6
Printiva Magenta	£6
Printiva Yellow	£6
Printiva Silver	£16

Epson

Styl. Col. 400/600 Black	£19
Styl. Col. 400/600/800 Col	£22
Styl. Col 800/1520 Black	£21

Hewlett Packard

Deskjet 340 Hi-Cap Black	£21
Deskjet 5x0 Series Black	£24
Deskjet 5x0/340C Colour	£26
Deskjet 6x0 Series Black	£24
Deskjet 6x0 Series Colour	£26
Deskjet 8x0 Series Black	£24
Deskjet 8x0 Series Colour	£26

Paper

500 Sheets (Fanfold/Single)	£5
1000 Sheet (Fanfold/Single)	£9
100 Sheets Epson 720dpi	£13
200 Sheet Canon Hi-Res	£25
500 Sheet HP Bright White	£11

3.5" Floppy Disks



Bulk DSDD

10x	£2.40	100x	£21.00
30x	£6.90	200x	£40.00
50x	£11.00	500x	£90.00

Branded DSDD

10x	£3.00	100x	£26.00
30x	£8.70	200x	£48.00
50x	£13.50	500x	£110.00

Bulk DSHD

10x	£2.40	100x	£21.00
30x	£6.90	200x	£40.00
50x	£11.00	500x	£90.00

Branded DSHD

10x	£3.20	100x	£27.00
30x	£9.30	200x	£50.00
50x	£14.00	500x	£115.00

500 Disk Labels	£7
1000 Disk Labels	£10

Amiga X-Cad available FREE from our Web site! - http://www.firstcom.demon.co.uk/

Amiga C Programming

PART 11

As the summer draws nearer we get out the duster, give our code a little spring clean and add a touch of user-friendliness.

This month we're going to look at some of the more tedious chores that need to be done to increase the usability of our program. A lot of these enhancements are obvious (and easy to implement), while some may require labourious running and testing our program before their need becomes apparent. And sometimes bad features show up only when other people run your code (hopefully, as beta testers!).

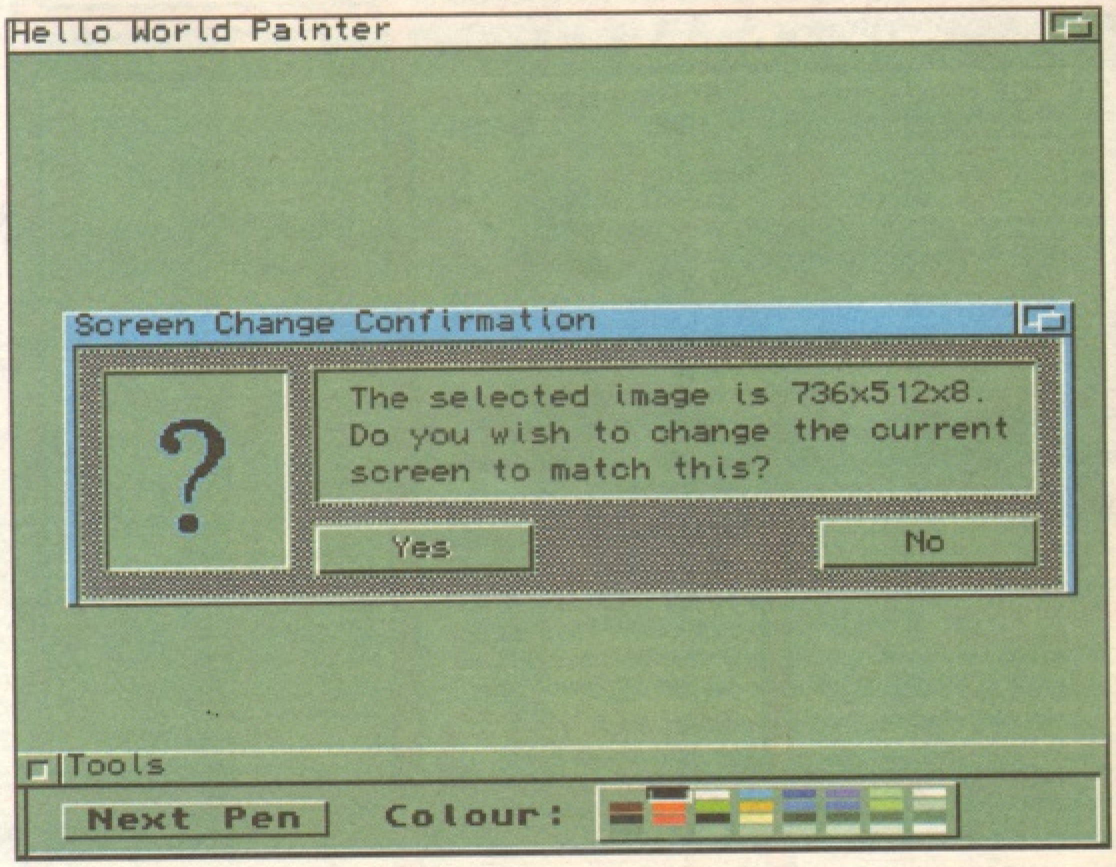
(Easy) Requesters

The most obviously unfriendly thing is the way that the "Quit" menu item causes the program to terminate immediately. The user isn't given a second chance and their (potential) work of art is lost forever.

So, the first part in our improvement plan is to 'guard' this action with a confirmation requester. The first example on the disks, "req0", adds the small piece of code needed to do this to the "case" for the "Quit" item in "idcmp.c" (see Example 1).

Take care to notice the use of "{..}" to introduce a new scope for the declaration of "myreq". This localises the variable to the small bit of code (the individual "case") that uses it.

Easy Requesters (from the Intuition library) are a nice, simple mechanism for getting choices from the user. At the simplest level, all that's needed is a filled-in "struct EasyStruct".



▲ Confirming a screen change

In the example, the interesting parts are the three strings: the requester title, the message to the user, and the button titles. The latter is specified as a single string with the individual button texts separated by a "|" character. The example "Yes|No" describes two button titles, so the requester will have two buttons: "Yes" and "No".

The "EasyRequest()" function uses this information and pops up the requester on the screen associated with the specified window ("drawwin" in the example). The result of this call is a number indicating which button was chosen: zero for the right-hand button ("No") and one for the left-hand ("Yes"). (And any extra buttons in the middle are numbered from the left starting at two.)

The body of the "if" will be executed only if a non-zero result is returned by "EasyRequest()". So the final effect is that the original "Quit" code will be run only if the user chooses "Yes" on the requester. If "No" is chosen then the "Quit" action is essentially ignored.

Of course, in our efforts to add user-friendliness through requesters, we need to be careful

Requester

A requester is a transient (short-lived) window that presents information to the user, and maybe enables the user to make a small choice to affect the following activity.

Two examples are the "About" requester (an item on the "Project" menu of Workbench and many other programs) and an ASL file requester (as used in our program for loading and saving images).

Example 1

```
case 5:  /* Quit (item 4 is the bar!) */
  {
    struct EasyStruct myreq = { sizeof(struct EasyStruct),
                                0,
                                "Exit Confirmation",
                                "Do you really wish to quit?",
                                "Yes|No" };
    if(EasyRequest(drawwin, &myreq, NULL))
      return FALSE;
  }
  break;
```

User-friendly

A program is regarded as user-friendly if it works in an obvious and intuitive way and does not perform destructive things without the user's express consent.

Stage one in becoming user-friendly is to eliminate bugs that cause crashes or loss of information. Later stages may be concerned with improving the user interface. The principal goal is ease of use.

not to require user interaction when ARexx commands are being run. For this reason, pretty much all the changes this month are made to the main IDCMP message handling code.

Modification

Even with our first step forward there's still scope for more friendliness: the user doesn't always want to be bothered by having to restate their desire to end the program, especially if they haven't used it all.

What we need is some way of noticing that the user has actually done something. For our program, this is probably whether they've modified the image.

To be accurate (and friendly), we need to remember when the image is different from something trivial (like a blank canvas) or something on disk. The second example on the disks ("req1") sprinkles code through "drawwin.c", "idcmp.c" and "loadsave.c" to create and maintain a "modified" flag, via a "setModified()" function.

The "if" part of the snippet in Example 1 has been updated to that shown in Example 2, so that the quit confirmation is not forced on the user if the program thinks the image has not been modified.

Notice that the 'short-cut' nature of the "if" statement is being used here to simplify the code (as we've seen before): if "isModified()" returns "FALSE" then the "EasyRequest()" part of the statement is not executed (so the requester does not appear).

The place where the image is modified is the code associated with the "IDCMP_MOUSEMOVE" message and the ARexx "DRAW" message. These both set the modification flag to "TRUE".

More interestingly, there are places which cause the image to no longer be considered modified. These are the erase/clear function ("new()") and the loading and saving of an image.

The fractal drawing is more problematic. Whether it's considered to modify the image is fairly arbitrary, since its effect is easily reproducible. (For the supplied examples, we've chosen for it not to change the modification state.)

Another couple of changes in the "req1" example are additional confirmation requesters. The code "Load" and "New" menu items have been augmented in the same way as the "Quit" item. In fact, the code is so similar it might be wise to factor out the commonality into some auxiliary function in the same kind of way as we've done before.

So, we've introduced some useful safeguards in program. Simple slips in menu selection no longer throw all the user's work away, and that's got to be a big improvement. But there's still more things that can be done.

About Versions

Every program ought to have some kind information box where the user can see vital statistics, like the program's name, version number, author and maybe some

Beta test

Usually the final stage in a program's development. 'Beta testers' are trusted or otherwise significant users who will run the program in its intended way, trying to locate problems, mis-features and bugs in both the code and its documentation.

The term 'alpha test' is sometimes used to describe an earlier stage in a program's life, when the program is being tested by the developers or other internal people.

Example 2

```
/* If the image isn't modified we don't need to ask... */
if(!isModified() || EasyRequest(drawwin, &myreq, NULL))
    return FALSE;
```

Example 3

```
case 5:  /* About (item 4 is the bar!) */
  {
    struct EasyStruct myreq = { sizeof(struct EasyStruct),
                                0,
                                "About",
                                "HelloPainter v11.2\n"
                                  "Brought to you by CU Amiga",
                                "OK" };
    EasyRequest(drawwin, &myreq, NULL);
  }
  break;
```

Example 4

```
#define PROGRAM "HelloPainter"
#define VERSION "11.3"

static UBYTE* VersionString = "\0$VER: " PROGRAM " " VERSION;
```

Example 5

```
struct Window* win = getDrawWin();
/* Try to adjust the screen to fit */
if(bmhd)
{
  struct EasyStruct myreq = { sizeof(struct EasyStruct),
                              0,
                              "Screen Change Confirmation",
                              "The selected image is %ldx%ldx%ld.\n"
                                "Do you wish to change the current\n"
                                "screen to match this?",
                              "Yes|No" };
  /* Only change the GUI if the user wants to */
  if(EasyRequest(win, &myreq, NULL,
              bmhd->w, bmhd->h, bmhd->nPlanes))
  {
    closeGUI();
    /* If this fails, our local win will then be set to NULL */
    openGUI(bmhd->nPlanes, bmhd->w, bmhd->h, displayid);
    win = getDrawWin();
  }
}
```

The templates that can be used with "EasyRequest()"

Template	Type	Description
%ld	LONG	Decimal number (32-bit)
%lu	ULONG	Unsigned decimal number (32-bit)
%lx	ULONG	Hexadecimal number (32-bit)
%lc	char	ASCII character
%s	char*	String

Example 6

```
if(AddPart(filename, savereq->rf_File, MAXFILENAME))
{
  struct EasyStruct myreq = { sizeof(struct EasyStruct),
                  0,
                  "File Overwrite Confirmation",
                  "The file %s already exists.\n"
                    "Do you want to overwrite it?",
                  "Yes|No" };
  int exists = FALSE;
  BPTR lock;
  /* Test whether the file exists by attempting a "Lock()" */
  if(lock = Lock(filename, ACCESS_READ))
  {
    exists = TRUE;
    /* Don't forget to "UnLock()" */
    UnLock(lock);
  }
  /* Only save in the suggested file if it's new or the user wants to */
  if(!exists || EasyRequest(win, &myreq, NULL, savereq->rf_File))
  {
    /* Make sure our bitmap is the same as the display */
    SyncSBitMap(win->WLayer);

    /* ...Rest of the code... */

  }
}
```

contact details. This can quite easily be done with a little requester as well.

The third example ("req2") adds an "About" menu item to the "Project" menu (in "menu.c") and code to handle it (in "idcmp.c", see Example 3). Take care to notice how the message string is split over two lines as two separate, literal strings. This is merely a convenience for the programmer to make the source code more readable; the compiler will join these into one big string.

Version information helps the user keep up-to-date with the latest program. To add this kind of thing in a useful way we need to be compatible with the Amiga's "VERSION" command. Luckily, this needs only to find a piece of text in the program in a particular format.

Example 4 shows the addition (to "idcmp.c") of a suitable version string to the next version of our program ("req3"). We've defined string constants (using "#define") so that the "About" requester can be consistent and use the same information. When the version (or program name) changes we need to update only one place in our code: the appropriate "#define".

Screen change

We'll step up a gear for our next requester. When a picture is loaded the screen resolution and depth is changed to match it. This may not be exactly what the user wants and the documentation for the IFF library states that it can handle loading an ILBM into a different size bitmap, so we could give the user the choice of reusing the current screen.

Example 5 shows another extract from "req3". The "loadfile()" function (in "loadsave.c") has been updated to include user confirmation. The key points to note are the use of "%ld" in the message text and the additional arguments to "EasyRequest()".

Each "%ld" is a place holder for a number. The actual numbers are those supplied after the "NULL" in the call to "EasyRequest()". This works in much the same way as the standard "printf()" function, with a varying number of arguments and roughly the same "%" templates allowed (in both the message and button title strings). The main difference is that only 32-bit ("LONG") values can be used (see the table). The end result is that if the user selects "Yes" the screen will be closed and reopened at the correct size, depth and mode (in the usual way).

But if they select "No", the picture will be loaded over the current image, with any extra screen pixels and bit-planes left untouched. (If we'd wanted to completely replace any previous image we could have first cleared the screen in exactly the same way as the "new()" function.)

File-friendly

The final change is to make saving pictures less destructive. At present, saving overwrites any existing file without warning the user. Again, this is a job for a simple requester.

The only technical problem this time is how to test whether the file already exists. The simplest way is to try to get a lock on file (using the DOS function "Lock()"). The last example, "req4", implements this test and user confirmation scheme, as you can see in the code snippet from the "save()" function shown in Example 6.

Well, that's it for requesters. Happy coding and see you next month. ■

Jason Hulance



▲ About the program

Back Issues

Looking for a specific Amiga article, game review, program, feature, tutorial, or even news story? Your search could well be over...



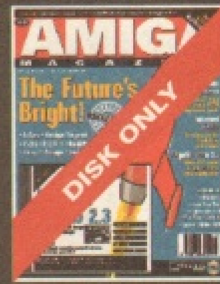
FEBRUARY 1997
Disks: Design Works, Minskies Furballs plus Worms – the Director's Cut extras and Imagine extras on the CD.
Features: The new A/Box
Inside: Wordworth 6 Office, Turbo Calc, Minskies Furballs, Bograts reviewed.



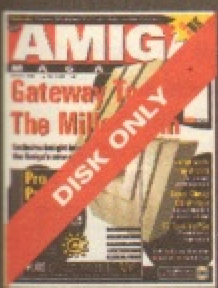
MARCH 1997
Disks: OctaMED SoundStudio (full program) Chaos Engine 2, Chaos Engine 2 AGA demo
Features: Turn your Amiga into a pro studio. Printers: problems solved.
Inside: Quickcam, Cybervision 3D, SMD 100, JetPilot reviewed



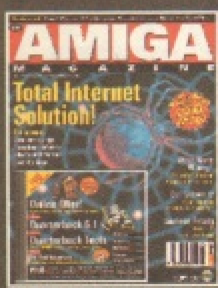
APRIL 1997
Disks: Directory Opus 5.11 (full program). Tiny Troops demo
Features: Build your own Tower Amiga Part 1. The 50 best Amiga Games
Inside: Massive Cinema 4D 3.0 Review, New DTP series, ProGrab Sampler, Teletext Decoder



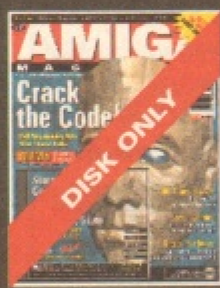
MAY 1997
Disks: Image Studio (full program) Kargon RPG, exclusive clipart on CD
Features: The Future's Bright: Gateway buys Amiga! Tower Amiga Part 2.
Inside: PageStream 3.2, Big Red Adventure, LightWave 5, Epson Stylus 600...



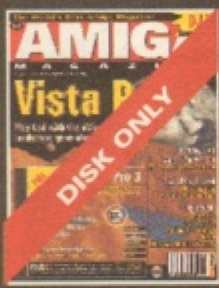
JUNE 1997
Disks: Pro Page 4.1 (full program) MPEGA 2.4, Sysinspector, The Sun game & more!
Features: CD-R for Amiga – cut your own CDs for a few hundred pounds plus Tower Amiga Part 3: Zorro.
Inside: Turbo Print 5, Net Connect, Cybervision...



JULY 1997
Disks: Free Net software, Quarterback 6.1 inc QB tools, Big Red Adventure
Features: Total Internet Solution, the history of the Amiga & a look at Amiga artist, Eric Schwartz.
Inside: Final Writer '97, Siamese RTG 2.0, Burn It...



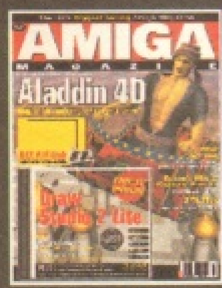
AUGUST 1997
Disks: Dogfight, Turbo Print 5 Lite, Storm C Compiler
Features: Power PC is coming, Crack the Code, plus Power Gaming
Inside: Cinema 4D, Voyager NG 2.90, IBrowse 1.12 & Tower add-ons...



SEPTEMBER 1997
Disks: Sixth Sense Investigations, Vista Pro, MakePath, GeoMorph
Features: New Faces of Amiga Gaming, Amiga: The Next Generation, DIY Sound Card
Inside: Art Affect 2, Art Studio 2.5, Micronik genlocks, Flying High



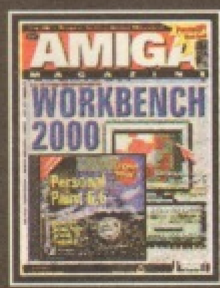
OCTOBER 1997
Disks: TFX, TB 303 Emulator, Virus Z, Video Easel, Visual Prefs
Features: TFX: Quickstart Guide/Techniques & Tips etc., Suzanne: The Portable Amiga
Inside: Fusion Mac Emulator, Civilization, Mk II EZ Tower, Storm C



NOVEMBER 1997
Disks: Draw Studio 2 Lite, AIR Link Software
Features: D.I.Y. AIR Link, Aladdin 4D V5.0, Hydra A1200 Ethernet, Sensible Golf
Inside: Epson Stylus Photo, OxyPatcher, More TFX Tips, Visual IFX, Envoy 2.0,



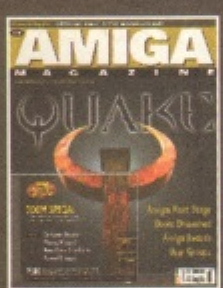
DECEMBER 1997
Disks: PC Task 3.1, Dir Work 2.1, Workbench enhancements; icons, backdrops etc.
Features: Myst, PowerUP: First look, ISDN: The Net on speed
Inside: Imaginex, HiSoft Squirrel CD-R, Sharp MD-MS200 Minidisc



JANUARY 1998
Disks: PPaint 6.6, Trapped 3 Demo, Sound Samples. CD Demos; Sound Probe, Foundation
Features: 1997 Review, Workbench 2000, Remixing with the Pros
Inside: Cyberstorm PPc, Picture Manager Pro, Appollo 630, Uropa 2



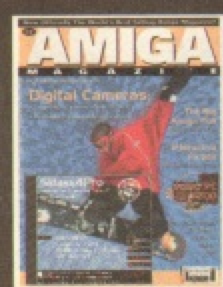
FEBRUARY 1998
Disks: SCALA MM300, Sword Demo, 600 Mb of Tools, Mods, Graphics
Features: Amiga Forever Emulator, The Big Switch (PowerPC), CDDA Mixer
Inside: Apple II Emulator, Distant Suns CD, Power Tower, Input Devices Round-Up



MARCH 1998
Disks: Doom, NetPBM, Cartoon Studio, AmIRC, VirusChecker III
Features: Amiga: Next Generation, Stars of '97, Quake
Inside: TurboCalc, HiSoft C++, WebFTP, Pagestream 3.3, Ultimate Super Skidmarks



APRIL 1998
Disks: Shapeshifter, Mac Emulator, PowerPC Doom, New SoundTrackers
Features: Take it to the Macs, Millennium Bug, PowerPC Update, PowerPC Winners
Inside: X-DVE 3.01, Siamese RTG, Doom Level Round-Up, Font Machine



MAY 1998
Disks: Interactive Fiction, Quake Demo, SBase4Pro, PowerPC Software
Features: The Big Amiga Poll, Digital Cameras, Interactive Fiction,
Inside: Blizzard PPC Card, Elastic Dreams, Fusion 3.1, Wordworth 7, Picture Manager Pro

Priority Order Form

Complete this form and send it with your payment to: CU Amiga Magazine Back Issues, Tower Publishing, Tower House, Sovereign Park, Lathkill St, Market Harborough, Leics. LE16 1EF. Tel: 01858 435 350.

Please rush me the following issues of CU Amiga Magazine

Issue date & type (CD or disk)	Quantity	Price
	Total price:	

Please allow at least 28 days for delivery upon receipt of request. All orders subject to availability.

☎ 01858 435 350

Rates: UK: £5.50 Europe and rest of world: £6.50. Except for CD-ROM editions: UK £6.99 Europe and rest of world: £7.99. All prices include postage and packing. Disks/CDs are included with all orders. CD edition is available for the April 1996 issue, and monthly starting from the November 1996 issue.

Method of payment

☐ Visa ☐ Amex ☐ Access ☐ Diners Club card ☐ Cheque (£ Sterling)

Card no .... Expiry date ....

Signature .... Date ....

Please make cheques payable to EMAP Images Ltd.

Title .... Initials .... Surname ....

Address ....

....

.... Postcode ....

Daytime telephone number (including STD code) ....

Surf's Up!



I'll have spam, spam, spam ,spam, spam, spam, spam, spam - spam, spam and more spam (c'mon, it was going to appear sooner or later wasn't it).

NetGod speaks

I see the start of a disturbing trend in Amiga Internet software, that of programmers ignoring standards and setting their own. Adding custom tags to an email program to alter the display of messages in that program only is not the way the Internet is supposed to work.

It's bad enough when our browser programmers are struggling to keep up with the flood of new HTML "standards" introduced by Netscape and Internet Explorer, without introducing incompatibilities between our own programs.

Email is about communicating information. When I read a message, I want to know what the writer is saying, what he/she is thinking. So much is lost in the transfer from spoken word to written word, lets not hide any of what little meaning remains by cluttering it up with meaningless formatting codes etc.

The same applies to quoting and monstrous signatures. What is the point of taking the time to compose a message with meaningful content if you then place obstacles between your message and its recipient. Magazines get flooded with complaints if they do something like printing light coloured text across a light coloured photograph.

If it's worth saying, it's worth saying intelligibly, the old sixties slogan of "the medium is the message" definitely has no place on the Internet.

Spam ahoy

Promote Responsible Net Commerce: Fight Spam!

While the amount of spam (irrelevant messages posted to multiple newsgroups) on Usenet is increasing, much of it is hidden from users by spam cancellers. These are programs that scan the newsgroups for spam messages and then send out cancel messages, causing the spam to be deleted from news servers. The organisations operating these services now feel that ISPs are taking less notice of spam, because of their efforts, quoting figures like 40% of Usenet posts are spam and another 40% are cancel messages, leaving only 20% for genuine traffic. As a result, they have decided to call a temporary, but indefinite, halt to their activities. From the beginning of April they are no longer cancelling spam. This means that unless your ISP takes their own anti-spam measures, you could start receiving a lot more. This puts the ball in the ISPs' court, so if you ever felt like complaining about the spam you receive, now is the best time to do it.



World Of Amiga

The 1998 World of Amiga Show takes place a few days after this issue is published. It seems likely that there will be some sort of announcement from Amiga International at the show, so if you cannot make it in person, keep an eye on the main news sites, such as CU Amiga Online and Amiga Web Directory. World of Amiga also has its own web site, at http://www.cu-amiga.co.uk/woa/

AWeb

Browser updates

Both IBrowse and Voyager have seen recent updates, available from their respective web sites. Voyager 2.95 is an update for both registered and unregistered users. IBrowse 1.2 is available only to owners of the complete version.

Both have had several changes, improvements and bug fixes, and Voyager is noticeably faster here, although there is still no sign of JavaScript support for either of

VoyagerNG

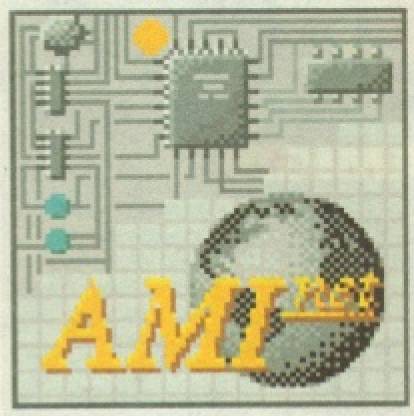
ibrowse 1.2

them. They both now have the facility to decode images in fast RAM, even without a graphics card, which should eliminate many of the problems people experience with graphics intensive sites.

There has also been a recent release of inline image decoders for AWeb, finally freeing it from its dependence on datatypes.

Aminet

Once again, the main Aminet site has suffered a hardware failure. While the mirror sites carry on working whenever this happens, there are no new uploads sent out to these sites. This time, the main German site took over the central duties for a while. Files



uploaded there or to other sites were mirrored across the Aminet network, although the mailing list still didn't work. Hopefully this means Aminet is becoming less dependent on the central site to keep working, which can only be a good thing as the number of files available continues to increase.

Saku 98

The newsgroups and mailing lists are buzzing with interpretations and rumours based on a speech by Petro Tyschtschenko at Saku 98 in Finland, in which he is alleged to have said "OS 3.5... we are trying to integrate Netscape". Unsurprisingly, this has generated a great deal of comment, opinion and hot air, but we'll just have to wait for a formal statement on the contents of 3.5. Petro is also reported to have stated that AI will "present our new concept for Amiga developers" at the World of Amiga show. Is the waiting nearly over? ■

Neil Bothwick



Surf of the Month

Neil Bothwick goes browsing the web - he's given up surfing because he keeps falling off the baud! (arf-arf.)

By way of change we are going to move away from Amiga specific pages to areas of more general interest in this edition of Surf of the Month.

Football, you can't escape it.

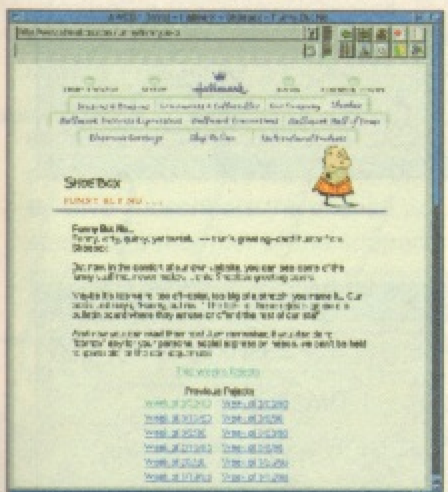
The finale of the English football season, the FA Cup final, coincides with the publication of this issue and the World of Amiga show, so this seems a good time to mention



FA Carling

the site that contains a wide range of information, the site of the main sponsors of the Premier League, Carling. With its comprehensive results and statistics, as well as projected tables and archives of previous years. It's also ideal for settling arguments or cheating at a pub quiz.

On a more global scale, there are several sites dedicated to World Cup 98. The official one is at http://www.worldcup.com, with authoritative information on schedules, ticket sales etc. But for really



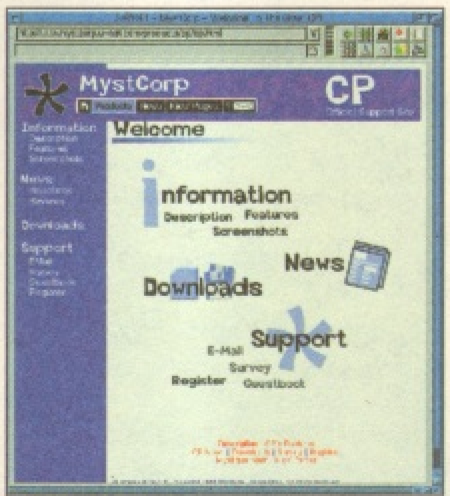
Hallmark



F1 Art & Genius

interesting trivia you really need to visit the unofficial sites, such as http://www.wldcup.com

Staying with sport for while, there are a lot of Formula 1 Grand Prix enthusiasts on the Internet. I suppose it's a techno thing (no Tony, no that sort of techno), with both computers and F1 having an appeal to fans of technology. There are a



Mystique Corporation

huge number of F1 sites, from the very good to the pretty dire, at the top end of this scale is "Formula One Art and Genius". It is a well constructed site with good graphics and plenty of in-depth information, by someone with an obvious love for the sport.

Another good source of Formula One information can be found on Yahoo. This is not an "enthusiast" site, instead it contains lots of factual and up to date information, including qualifying time and race results, as and when they happen.

URLs

FA Carling	http://www.fa-carling.com
World Cup 98	http://www.worldcup.com
Greeting cards	http://www.shoebox.com/funny/funny.asp
Mike's Web Resources	http://www.u-net.com/mike
F1 Art & Genius	http://www.f1-grandprix.com
Yahoo F1	http://www.yahoo.co.uk/f1-live/?http://www.f1-live.com/GB/
reallybig.com	http://www.reallybig.com/default.htm
Mystique corporation	http://www.mystcorp.u-net.com
CU Amiga Online	http://www.cu-amiga.co.uk

It'll be alright on the Birthday?

Have you ever looked at a so called "humorous" greeting card and thought "I could do better". Well there is now a site by a major greeting card company showing the efforts of some of the people who thought just that. Shoebox is a division of Hallmark, and their web site includes a selection of "out takes".

If you think a good greeting for a birthday card is "Happy birthday to a great kid. Hope it's more fun than ripping the spinal cord out of some video game character" this is the site for you.

Web resources

While many people are happy to browse other web sites, sooner or later many feel the need to create their own. However, after spending so much time looking at high quality sites, with impressive graphics, you wonder how you will ever manage to create something that looks good. As always the solution is on the web. There are many sites of WWW resources, from simple graphics for buttons and backdrops, to extensive tutorial on HTML and freely distributable CGI and JavaScript scripts.

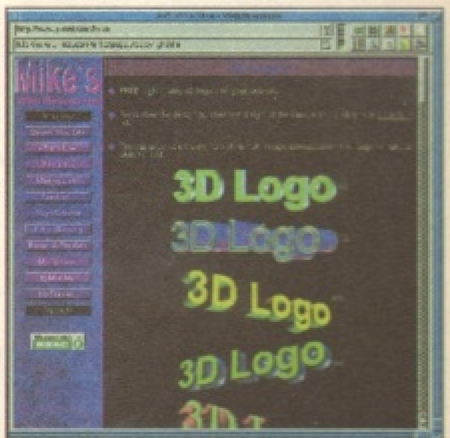
Whatever you need, the chances are it's waiting for you somewhere. Mike's Web Resources started as a collection of graphics and links on a home page and just kept growing. There is now a huge collection of graphics, HTML examples and just about anything you need, including a form to type in some text and have it sent back to you as a 3D rendered logo. Reallybig.com is as big as its name implies, with a massive set of resources and links to other sites. Not only graphics and tutorials, but scripts, hit counters, logging tools and much more.

Educational Amigas

One area where the Amiga has always been lacking is in educational software. This is an extremely important area since it is often used as a justification for buying a computer in the first place.

One company working to correct this omission is Mystique. Their site is sponsored by Amiga International, showing the importance they place on this market. The site contains information on their products, together with news and a section entitled "Kids Pages". ■

Neil Bothwick



Mikes Web Resources

Wired World

STFax is a fine fax program. Now we investigate its other talents by setting up a voicemail system.

With a name like STFax, it's not hard to guess that this is a fax program. However, it has several other functions too, such as voicemail. Now you can use your Amiga as anything from a basic telephone answering machine to a pretty sophisticated voicemail system, with multiple mailboxes, faxback and much more.

We will look at the features available and how to integrate them into a script, you can then pick and choose which of these are relevant to your needs.

Basic telephone answering

Before we can use STFax for voice messages, we need to check a few preferences settings. In the Misc section, turn on Auto Answer and set Mode to either Voice Only or Fax/Voice. In the Timeout section, set the modem timeout to the lowest figure that doesn't cause errors. Start at 3 and work up or down from there. A high timeout can result in STFax taking longer to answer incoming fax or voice calls.

Once you have saved the settings, you can select Voice Settings from the Voice menu. STFax comes already set up for basic telephone answering. All you need to do is record some messages. STFax insists that you record certain "system" messages, although these will not be used in a simple answering machine script. The important message is the one you use for your greeting, something like "I can't answer the phone right now, please leave a message". You should already have a default voice box and a script that consists of a single command, RECORD MSG. Double-click on this and select the greeting message you previously recorded. Save the script and you are ready to go.

The best way to test your script is to call from another phone. If you are a dedicated nethead with two phone lines, or you have a mobile phone, this is easy to do. The script editor also has a test mode to check out your scripts, but it is still best to do a final test from another phone. This is important when we move onto more advanced scripts.

Other features

Apart from a basic answering system, STFax has many other voicemail features, let's have a look at the main ones before looking at how they can be integrated into a system:

Menus
Present the caller with a list of choices that they select from using the buttons on their phone

Multiple voice boxes
Callers can leave messages for different people, so each person gets only their own messages

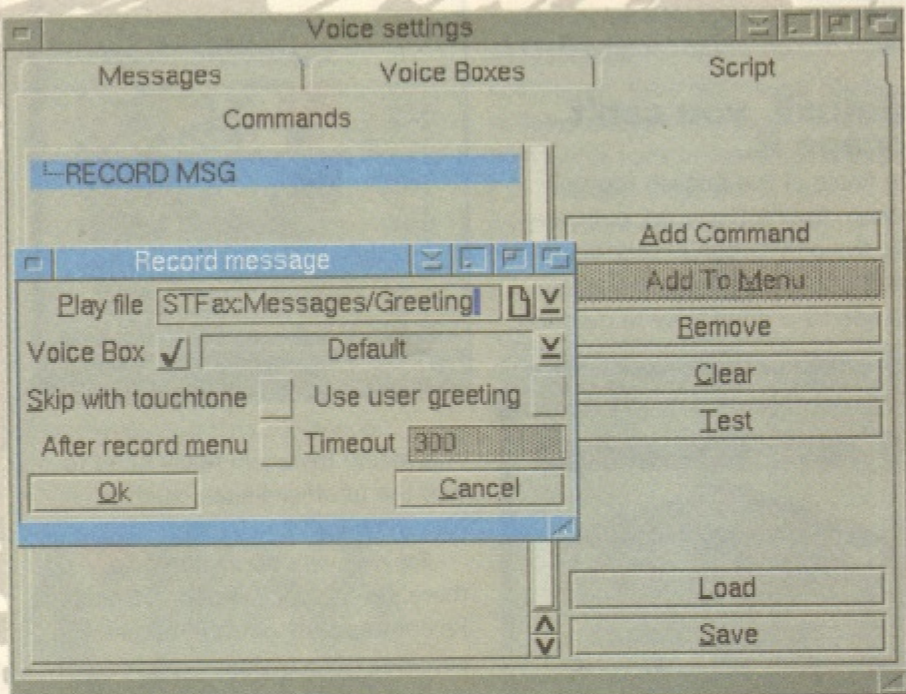
Call Operator
Alerts the user of an incoming call, if there is no answer it returns the caller to the menu to leave a message

Faxback
Send documents to anyone calling from a phone attached to a fax machine (or faxmodem)

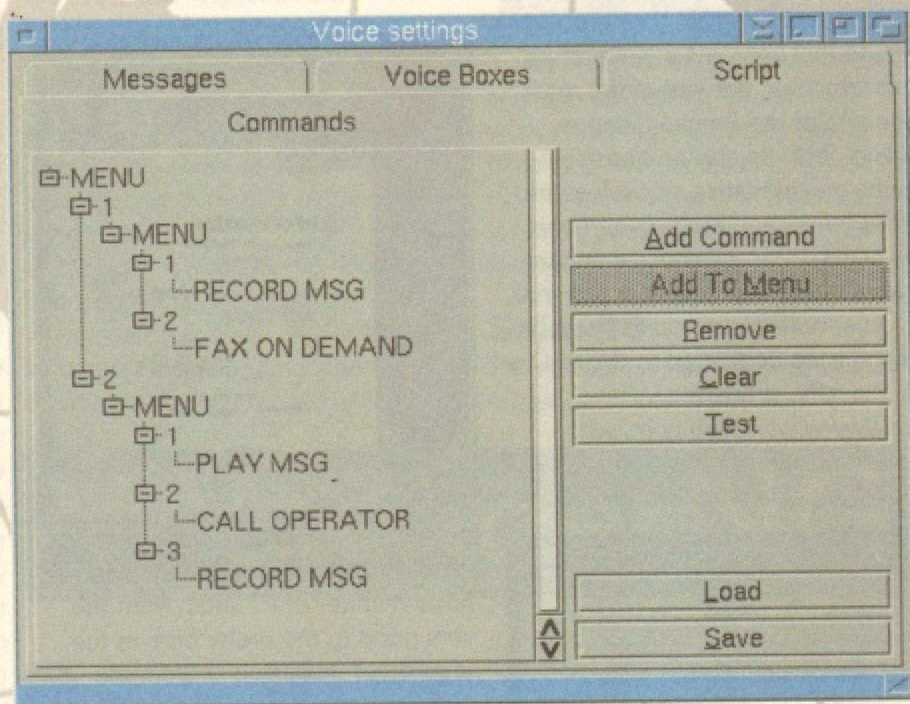
CallerID
Use different messages for callers from specific numbers. Handy if you want to pass a message to someone but have to go out. Just record the message and attach it to their phone number

Call screening
Used in conjunction with CallerID, gives priority to or blacklists specified numbers. Useful for blocking calls from telesales companies (or production editors hassling you for copy)

Remote access
Each user can call in and hear the messages in their password protected voice box

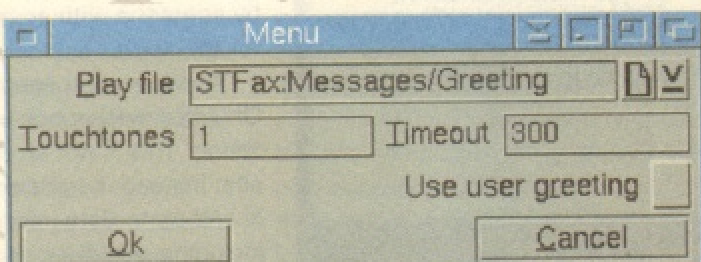


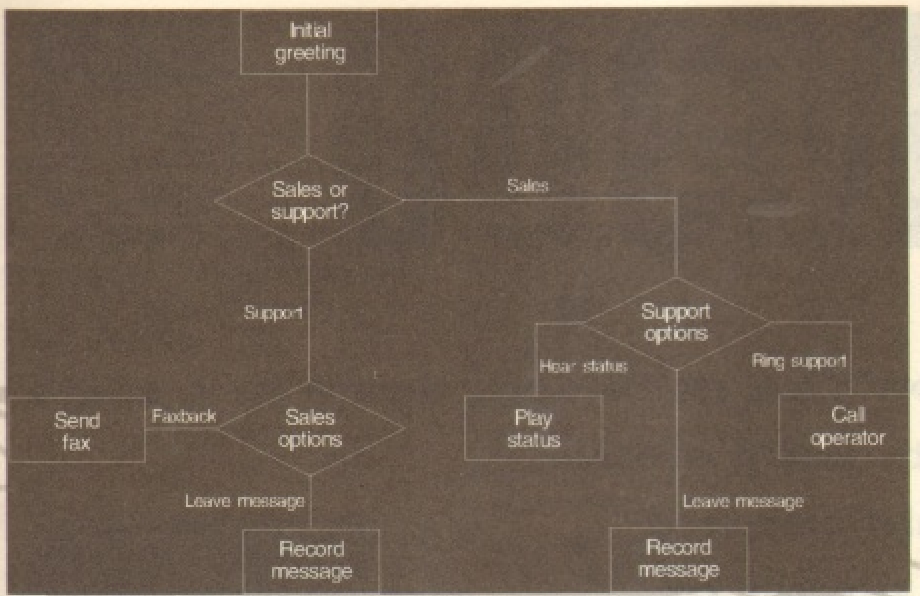
▲ A basic answering machine script



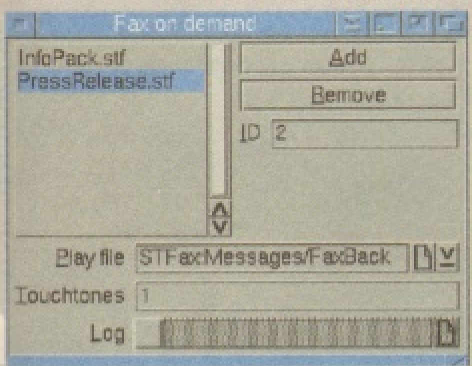
▲ This is the completed script

Configuring the first MENU item ▶

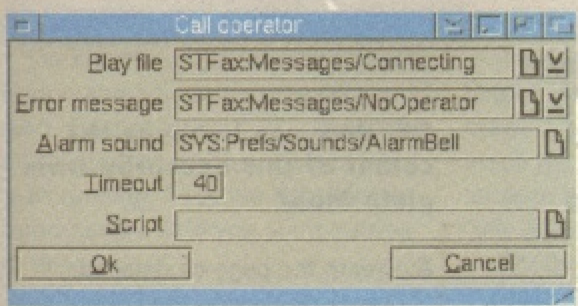




▲ A Flow Chart makes organising and modifying your voicemail system so much clearer



◀ Selecting faxes for the FaxBack option



▲ The Call Operator function

More complex example

Now let's build a script using the main features. Although this example is for a business use, it can just as easily be used in a family setting. We'll use the example of an "imaginary" ISP who wants to handle a variety of calls out of normal office hours like this:

- Separate sales and support calls from each other
- Give sales enquirers the option of leaving a message or receiving literature by fax
- Allow subscribers to listen to a pre-recorded status message
- Give subscribers the chance to speak to a member of the support staff if available, or leave a message otherwise

Before we can create the script we need to work out exactly what will happen to each caller and then record the various messages. So before you reach for your mouse, pick up a pencil and paper instead.

The voicemail system you set up will be the first contact many people have with you, so you need to make it clear and concise. People do not want to listen to one long message after another before they get where they want. It's a good idea to listen to other voicemail systems to get an idea of what is good and what is frustrating or plain annoying. Then put the script on paper using a flow chart. If you cannot lay the script out clearly on paper, then your callers will probably find it confusing too. You can see how the flow chart for our example system makes it simpler to understand what is going on.

The next step is to prepare the messages. Once again, write each message down to make sure it is clear and suitable. Think about the order in which you present menu options. A new caller will not want to listen through several options before being offered the most basic choices, so put those first. A regular caller may know which choices he wishes to make and will be able to interrupt the menu message, so there is no time lost in putting those options later.

Once you've outlined the script and messages, it's time to put it all together. Select Voice Settings from the Voice menu and record your messages in the Messages section, either recording them direct or importing previously sampled files.

This example uses two mailboxes, so click on the Voice Boxes tab and add two new boxes called Sales and Support, with IDs of 1 and 2 respectively and give each one a password. The passwords will enable you to listen to the messages from another phone. You will need to create a directory for each to store its messages, say Messages/0001 and Messages/0002. Now you have the messages and mailboxes ready, click on the Script tab to build the script. The default script has a single item of RECORD MSG; remove this to start with an empty script.

Creating the script

The flow chart starts with an initial greeting, leading to a choice. Click on Add Command, select MENU from the list and select your introductory message for Play file. Set Touchtones to 1, to have the menu wait for the caller to press a single key on the phone. Select the new menu, click on Add To Menu, and put "1" in the ID field. This is the section that will be executed when the caller presses "1" at this menu.

The caller has to make another choice here, so add another MENU, with the appropriate message, and another "1" option. Select the new entry, click on Add Command and then RECORD MSG. Enter the relevant message file here, tick the voice Box gadget and select the Sales box. When the caller presses "1" at this menu, they will be asked to leave a message that will be stored in the Sales voice box.

The next option is to receive a document by fax. Reselect the previous MENU entry then Add To Menu, give this one ID 2. Select the new entry, click on Add Command and then FAX ON DEMAND. You can have several previously created faxes available here, give each one a different ID number and list them, with their IDs in the message file you play from here. If only one fax is available, the user still needs to press a key to start the transfer. As before, set Touchtones to 1.

Now go back to the first MENU entry, select Add to Menu and ID 2. Once again this leads to another menu, this time with three choices, so create the new MENU and select Add To Menu three times, with IDs 1, 2 and 3. The first option is to hear a recorded message, so select "1", and use Add Command to add a PLAY MSG item with the appropriate message. For the second option add a CALL OPERATOR. This will notify you that someone wants to speak to you, and play a message to the caller while waiting for you to answer. If you do not answer within the Timeout period, STFax will play the No Operator message and return to the previous menu. The third option on this menu is another RECORD MSG, this is for the caller to select if the Call Operator fails. Set it to use the Support voice box.

This way you can have your voicemail system divert some calls straight to the recording system, while passing others through for personal attention, when available.

That's it, the script is finished and will be ready to use once you've tested it. Make sure you set touchtones to 1 wherever there is this option and that all message files have been correctly set up.

Using STFax for your own needs

This example demonstrates the use of the main voicemail features of STFax, in a way that can be adapted to most business or family situations. Once you have it set up, it should be fairly easy to adapt to your own needs. ■

Neil Bothwick

Voice modems and CallerID

Not all modems support all the features of STFax. Some modems have limited voice features, or poor recording quality. It's worth checking this when buying a modem. CallerID also relies on support from the modem, and the UK system is different from the International standard. To use the CallerID features in Britain, you need a modem that supports the UK system, whereas most modems should work with other countries' systems.

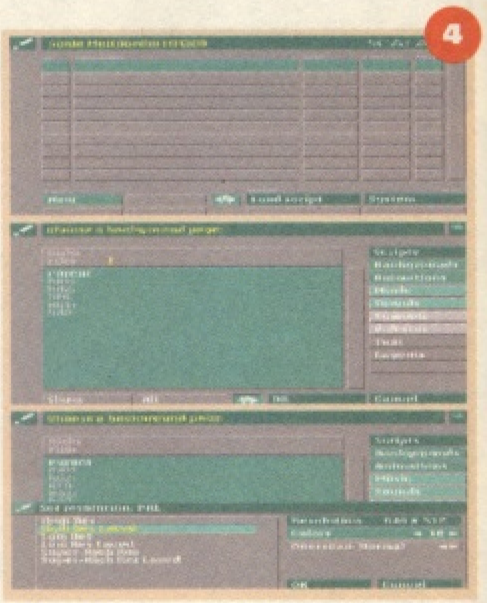
There are many other things you can do, especially with the addition of some ARexx. For example, you can have STFax automatically email received messages or faxes as they come in. It should also be possible to use ARexx to send a message to a pager whenever a message is recorded. Instead of ringing in to keep checking for messages, you only call when you know there are messages to be collected.

Scala MM300

PART 4

It might look rather basic, but don't be deceived: Scala has some really advanced tricks up its multimedia sleeve.

We saw last month how it could control your home TV and hi-fi using the power of ARexx and the Airlink Infrared interface, and that's only the start.


4

This month however we give over the tutorial to answering some of the many questions which you've asked about using Scala to create your own projects. If you've created any exciting scripts, why not send them into the magazine office, so we can put the best on the CU Amiga coverdisk?

Questions and Answers

Q1. What's the quickest way to make a slideshow?

A. Start with a blank project, and click on New. This will bring up the background selector. Find the directory with all the images you want to appear in the slideshow.

Now select them all in one go, by holding down the shift key as you click on them. When you click on OK, all the files will be loaded as new pages in your script.

Q2. How can I apply the same wipe quickly to a collection of pages?

A. Click on the Wipe slot in the first page in the collection you want to change. When the usual Wipe window appears, select your the wipe you want to use. Before you click on OK, make sure there is a tick on the "To End" button. This will alter the wipe settings on all the subsequent pages. You can do the same thing to alter the Pause setting.

Q3. Can I alter the pre-set wipes?

A. Yes, although not all to the same extent. When selecting the wipe you want to use, try pressing on the following keys. Notice too that using the numeric keypad it is possible to change the direction in which some of the wipes operate.

i	Ease in
o	Ease out
d	Damped
b	Backwards
c	Clear page before wipe
t	Transpose – turn the wipe 90 degrees
s	Soft fade – fade the display slightly during the wipe

Q4. How can I create a blank backdrop for my scripts?

A. If you want a backdrop which doesn't consist of an IFF picture backdrop, here's what you do.

1. Assuming your script is empty, click on New to create the new page.
2. You'll be placed in the usual "Select a Background page" requestor.
3. Don't select any pattern, just click on "OK". You can now select the screen resolution and colour depth for Scala to use.

You can now add your own details, if required, using the drawing tools.

Q5. How can I change the colour of this backdrop from plain blue?

A. Create the page as detailed above. Now click on the Palette button, and you'll bring up a new window. One of the options will be Background. Select a colour from the horizontal colour stripe, and then click on the Background button.

Q6. How can I add two sound effects to the same page?

A. Add the first sound effect in the usual way: click on the Sound button in the script list, and select the sound effect. Now click in the sound slot in the blank line directly underneath your first page, and add the second sound effect.

Q7. Can I use other Scala Scripts inside my current project?

A. Yes. This is a great way of organising your work. If you have created a great introduction script, you can use it in your other projects by simply including it as a page

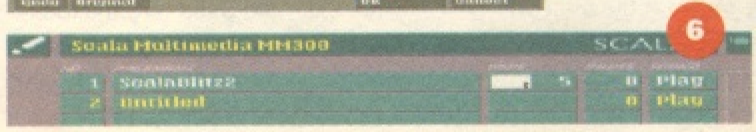


1



2


5



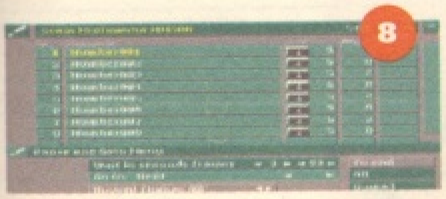
6

of its own. Save the script you want to use in other projects, giving it a sensible name.

From your new project, click on New as though you were going to add a new page as usual. Click on the Scripts button and locate your saved script. The new project will display the script on a single page, even it if consists of dozens of its own pages.

This makes it easy to drag and drop it to change the order it is played in.

Q8. How can I adjust timing to sync my slideshow to music?



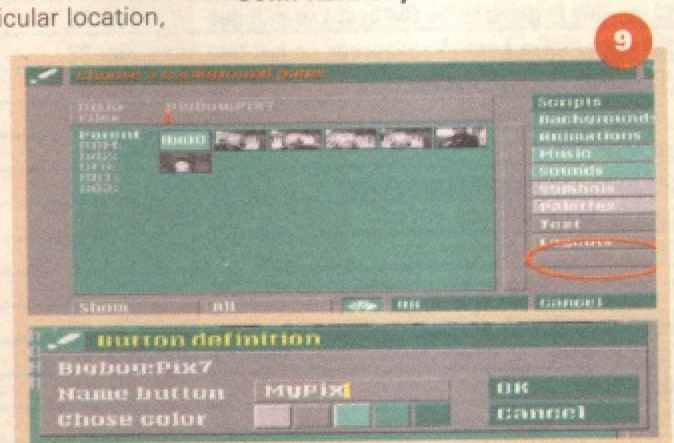
A. Scala allows you to select the timing for pages in an interactive way: you can watch the presentation and click on the mouse when you want the pages to change.

To set this up, click on the Pause button and adjust the time setting to read "Record Timing: All". Then click on this button, and your script will start running. Click the right mouse button every time you want a page to change.

Q9. Can I make my own buttons in the file requestor?

A. If you find yourself constantly loading from a particular location, from CD for example, it can be a real time-saver to create a new button. From the file requestor, locate the directory that you want to use.

1. Now click on the empty button at the bottom of the list on the right hand of the screen
2. You'll be asked to enter a new name, and select a colour for the button
3. That's it! Your new button will be added to the list.





Q10. What does Genlock mode do in the System Menu?

A. Genlock mode forces Scala to display its menu in a transparent way, so you can see the video signal underneath. By default the menus are solid.

Q.11 What's the difference between Dynamic and Static page buffer?

A. This is another setting in the System menu. If you use a Static buffer, all the images and sounds required by a script will be loaded before it starts playing.

This can obviously take up a lot of memory, but the result is much faster and smoother. By default, the setting is Dynamic, and so pages are loaded and purged as required.

Q.12 How can I make a line of text scroll across the screen?

A. To make text crawl along the screen, create a new page and type in a line of text in the usual way. Highlight the text and then select the IN wipe button on the editing screen.

This will bring up the Text Wipe display. Now select one of the two crawl wipes. The first wipe will scroll the background too: this is smooth but can destroy your carefully drawn background.

Try the second crawl wipe instead, although with some backgrounds (those with lots of colours) or larger fonts this can flicker slightly. ■

John Kennedy

Keyboard Shortcuts

Main Menu

F1 / cursor up	Previous event
F2 / cursor down	Next event
Shift F1 / cursor up	First event
Shift F2 / cursor down	Last event
R Amiga Q	Quit
R Amiga N	New
R Amiga E	Edit
Right Amiga and D	Delete
DEL	Delete
Space	Run
R Amiga R	Run
R Amiga L	Load script
R Amiga S	Save script

Edit Menu

F6	Select / Deselect all objects on page
F8	Anti-alias level
F9	Show / hide boxes
F10	Redraw screen
R Amiga K	Change to lower / upper case text
R Amiga -	Change text justication
R Amiga X	Cut
R Amiga C	Copy
R Amiga P	Paste
R Amiga V	Paste
R Amiga Space	Show
R Amiga A	Copy attributes
R Amiga G	Give attributes
R Amiga J	Depth arrange
R Amiga H	Halve brush / drawing tools
Shift R Amiga H	Double brush / drawing tools
Shift R Amiga X	Double brush / drawing tools width
Shift R Amiga Y	Double brush / drawing tools height
R Amiga ,	Pick colour
R Amiga [or]	Change selected colour
HELP	Hide / show edit menu
ESCape	Stop drawing tool operation



Reviews Index

There's no need to go searching through countless magazines trying locate a specific product review. We've compiled all of the technical & game software reviews from the last two and a bit years up to the March '98 issue of CU Amiga.

We're alternating between two categories in subsequent issues: this month we've got games and CD-ROMs, next month we'll switch the index to productivity software and hardware. We'll also give updates from each month as they happen.

Bear in mind that the scores listed are the original scores awarded to the products at the time of their reviews. These should be taken as a rough guide only, as they are all relative to the rival products and prices that were available at those times, which may have changed since.

If you would rather see us re-rate the products with hindsight and in context with newer rival products, let us know. Likewise, if you would like any other specific info or service from this index then please feel free to give us your opinions on the back of a postcard or sealed envelope.

The first ten to put their thoughts into words will get a Wizard Mouse free of charge. This 3-button mouse was accidentally left out of our recent Input Device round-up, which was ironic, as it would have been the highest scoring product of them all! Anyway, write to:

Wizard Mouse Compo,
CU Amiga,
37-39 Millharbour
Isle of Dogs
London
E14 9TZ

Title	Type	Comment	Review Date	Score
CDs				
Light ROM 5	3D objects	A good collection of objects and textures for the amateur renderer	Oct 97	89%
Dinosaurs ROM	3D objects	Very professional objects of a range of dinosaurs	Oct 97	88%
Multimedia Back drops	Backdrop pictures	The artwork is of high quality but it's dull	Jan 97	62%
Card Games	Card games	Not just card games but others such as Monoploy and Chess	Feb 97	80%
DEM ROM	DEM Files	Over 1000 DEM maps of North America	Oct 97	84%
Euro CD	Demos	If you like art and sound demos you will love it	Feb 97	88%
Geek Gadgets 2	Development tools	There is a lot going on this disc but it is for hard-core coders only	Sep 97	84%
Amiga Repair Kit	Diagnostics	Not much for the money but Disksalv is very powerful	Feb 97	71%
Epic Interactive Encyclopedia	Encyclopedia	A really worthwhile disc	Apr 97	91%
The Learning Curve	Encyclopedia	A very impressive resource	Jan 97	93%
Epic Encyclopedia of the Paranormal	Encylopedia	Very polished but a little shallow	Jul 97	87%
Fontmania	Fonts	A best buy for fonts	Jan 98	90%
The Games Room	Games	If you don't have a collection just yet this is going to be the best you can get	Jan 98	90%
Scala Plug-in	Graphics for Scala	Anyone seriously using Scala can never have enough resources so get this	Sep 97	88%
Imagine 3D PD	Imagine objects	If you are an Imagine user this CD could save you some time	Jan 97	88%
Into the Net	Internet	Full of Internet tools and loads of sample web pages	May 97	91%
MIDI Net	MIDI files	Basically a massive collection of MIDI files	Oct 97	78%
Amiga Desktop Video CD2	Pictures and sounds	Full of pictures, fonts and sounds to use in your presentations	Mar 97	90%
The Hidden Truth	Reference	Not quite polished enough but lots to explore	Jul 97	90%
History of the World Cup	Reference	A football fan's delight	Jun 97	90%
17bit Level 6	Various	There are so many files on here there is bound to be something for you	Mar 98	81%
Virtual Computer Pets	Various	A large collection of Tamagotchi type programs along with various pics	Mar 98	86%
Aminet 21	Various	More of the latest downloads from Aminet	Jan 98	89%
Aminet 20	Various	More of the latest Aminet downloads	Oct 97	91%
Amy Resource European Edition	Various	A good selection of commercial software along with the usual demos	Oct 97	92%
Aminet Set 5	Various	The ultimate CD collection	Oct 97	94%
Aminet 19	Various	More of the latest downloads from Aminet	Sep 97	88%
Epic Collection 3	Various	This CD seems to have a something from each Epic CD so there is plenty	Aug 97	82%
AGA Experience Vol. 3	Various	Packed with demos games and animations there is something here for all	Aug 97	91%
AGA Toolkit 97	Various	The amount of stuff on this CD is truly awesome	Apr 97	92%
Aminet Set 4	Various	Unless you have been collecting the single Aminet discs this is a must	Apr 97	92%
Meeting Pearls 4	Various	Similar to Aminet but more technical	Mar 97	88%
Aminet 15 & 16	Various	Another selection of the latest Aminet downloads	Mar 97	90%
Euro CD 2	Various Demos	A strong collection good for someone starting their CD collection	Sep 97	85%
Aminet 14	Various Demos	Not the most impressive Aminet CD but still excellent	Jan 97	90%
System Booster	WB Utilities	There are 2000 utilities on this CD that will improve your system	Feb 97	92%
Web Explosion CD	Web clipart	Superb web design package	Apr 97	92%

Title	Type	Comment	Review Date	Score
Games				
Myst	Adventure	A superb game which looks great too	Feb 98	92%
The Strangers AGA	Beat `em up	Lots of fancy dressing around a basic beat 'em up	Oct 97	60%
Master Axe	Beat 'em up	Not quite up to SF2 but still good	Apr 97	76%
Fighting Spirit ECS	Beat 'em up	Basically the same as the AGA version	Feb 97	82%
Fighting Spirit	Beat 'em up	The best SF clone on the Amiga	Jan 97	83%
Ultimate Gloom	Doom style	Disappointing third installment but the originals still cut it	Jan 98	80%
Fears CD	Doom style	Well worth a look if you like blowing away cartoon octopi	Dec 97	85%
Nemac IV	Doom style	Not particularly original but playable and polished	Sep 97	85%
Trapped 2	Doom style RPG	Sophisticated graphics plus a great game!	Nov 97	92%
Trapped	Doom style RPG	A good concept but poor execution	Aug 97	79%
The Shadow of the Third Moon	Flight sim	A superb game which looks great too	Jan 98	92%
Gunship 2000	Flight Sim	It is guaranteed to keep you up every night	Oct 97	90%
Dogfight	Flight sim	So badly programmed not even die hard fans would like it	Mar 97	30%
B17 Flying Fortress	Flight sim	What it lacks in excitement it makes up for in atmosphere	Mar 97	79%
Jetpilot	Flight sim	Detailed sim that lacks speed	Mar 97	66%
John Barnes Football CD	Football	This game should never have been given a re-release	Dec 97	20%
FIFA Soccer	Football	It looks great in the screenshot but frankly it's rubbish	May 97	50%
Sensi World of Soocer 96-97	Football	Still the best footy game on the Amiga	Jan 97	95%
Strip Pot CD	Fruit machine sim	Cheap tasteless and very sad	Dec 97	2%
Sensible Golf	Golf	If you are looking for a game that will give you a good laugh this is it	Nov 97	87%
PGA Tour Golf	Golf	This is an essential buy for all sports fans	May 97	93%
Championship Manager 2	Manager sim	If it used modern spec Amigas it would score much higher	Dec 97	70%
Euro League Manager	Manager sim	OK to look at and fairly playable(ish)	May 97	51%
Pinball Brain Damage	Pinball	A few new tricks but the older dogs are still tops	Mar 98	65%
OnEscapee	Platform	Art or computer game? Who cares when it's this much fun!	Feb 98	92%
Impossible Mission 2025	Platform	The game is a bit easy but still fun	Feb 97	80%
Vital Light CD	Puzzle	Vital Light is one of the very best pseudo Tetris games around	Dec 97	88%
Marbleous	Puzzle	If you're looking for a challenging puzzler look no further	Jul 97	63%
Big Red Adventure	Puzzle	A must for people who loved Monkey Island	May 97	90%
Blockhead	Puzzle	Puzzle fans will enjoy, otherwise steer clear	Apr 97	67%
Minksies Furballs	Puzzle	Excellent Tetris Clone	Feb 97	88%
Street Racer	Racer	Fun and varied racer best played with a few friends	Nov 97	97%
Flying High	Racer	Great looking game unfortunately no gameplay	Sep 97	68%
Road Rash	Racing	This game doesn't have lasting appeal but is good in the short term	May 97	72%
Legends CD	RPG	This one will keep the RPG fan going for quite a while	Dec 97	85%
Blade	RPG	The hack and slash aspect is fun but it can leave you feeling empty	Dec 97	86%
Sword	Shoot 'em up	Nice try but in the end Sword doesn't quite cut it	Feb 98	78%
Final Odyssey	Shoot 'em up	Impressive stuff reminiscent of old Bitmap Brothers fare	Feb 98	87%
Guardian CD	Shoot 'em up	A cross between Defender and StarWing, this game is very satisfying	Dec 97	90%
Total Carnage CD	Shoot 'em up	Total Rubbish more like	Dec 97	38%
Cannon Fodder 2	Shoot 'em up	If you liked CF1 then you will like this too	Dec 97	88%
Cannon Fodder	Shoot 'em up	This game is still great fun to play and it's full of laughs	Dec 97	90%
Vendetta 2175	Shoot 'em up	Smooth and professional but unengaging	Aug 97	73%
Mega Typhoon	Shoot 'em up	Although average it is not unplayable	Jul 97	74%
Castle Kingdoms	Shoot 'em up	Too easy for anyone but OK for the younger players	Jun 97	60%
Desert Strike	Shoot 'em up	There's enough action to keep any warmongers happy for weeks	May 97	90%
XP8	Shoot 'em up	A fast smooth scrolling shoot 'em up	Mar 97	75%
Special Forces	Shoot 'em up	A bit tedious and slow	Feb 97	55%
Tommy Gun	Shoot 'em up	Scrolling shoot 'em up which is too easy to last	Feb 97	60%
Chaos Engine 2	Shoot 'em up	Great single or multiplayer game	Jan 97	90%
Wing Commander	Space sim	A good zap that's worth a show	May 97	92%
Starlord	Space sim	You would be much better off getting Frontier instead	Mar 97	35%
Uropa 2	Strategy	It won't win the Nebula but it's still fun	Jan 98	88%
Mobile Warfare	Strategy	Would probably get a good score a year ago	Mar 98	68%
Dune 2	Strategy	The forerunner of Command & Conquer this is absorbing and challenging	Nov 97	92%
Railroad Tycoon	Strategy	It takes time to master but once you do it is an incredible game	Oct 97	90%
Civilization	Strategy	One of the best games ever produced	Oct 97	94%
Theme Park	Strategy	A great game for anyone wishing to build their own Disney World	May 97	88%
Tiny Troops	Strategy	Good game but not a classic	Apr 97	69%
Colonization	Strategy	Not quite the sequel to Civilization but still good	Feb 97	85%
UFO	Strategy	A great strategy game which is still a classic	Feb 97	93%
Blitz Tennis	Tennis	Over simple controls and terrible graphics make this game a no-no	Nov 97	49%
Ultimate Super Skidmarks	Top down racer	If you don't already own it buy it otherwise avoid	Mar 98	70%
Burnout	Top down racer	The gameplay doesn't seem to go anywhere	Mar 97	43%

KEW = II SOFTWARE

Est. 1989

THE BEST IN QUALITY PD & SHAREWARE
SUPPLIED ON BRANDED DISKS ONLY!

The LEADER -
OTHERS CAN ONLY FOLLOW!
FREE FRIENDLY HELP BY
POST or PHONE ANYTIME!
FREE CLUB MEMBERSHIP

PICK YOUR OWN PROGRAMS!
BY NAME, NUMBER AND SIZE!
IT'S EASY!
500K makes 1 bootable disk!
800k makes 1 non bootable disk!

CATALOGUE WITH FULL DESCRIPTIONS & INDEX ONLY £1
Phone for the LATEST PROGRAMS! 1-3 disks £1.50, 4 or more ONLY £1.25

P.O BOX 672
South Croydon
Surrey CR2 9YS
Tel: 0181 657 1617

FREE P&P

NORWICH PD

Dept (CU) 43 MOTUM RD, NORWICH, NORFOLK, NR5 8EH. TEL: 01603 504655
E-MAIL norwichpd@albatross.co.uk

F1 Software & 5D Licenceware

STAR BOY (ShootEmUp)	£3.99	Any Amiga
EURO MANAGER (Football Manager)	£3.95	A600/A1200
HILT II (Good RPG)	£4.95	Any Amiga
SOREFIST (BeatEmUp)	£3.99	A600/A1200
EDWORD PRO V4.1 (word Processor)	£3.99	Any Amiga

Amiga CD ROMS

AMINET 10, 12 or 13	£7.99
OCTAMED SOUND STUDIO CD	£4.00
SCENE STORM	£5.00
AKIRA	£2.99
INSIGHT TECHNOLOGY	£3.99

ALL THE CD ROMS BELOW ARE £2.99 EACH
INSIGHT DINOSAURS, FIREFORCE, GUARDIAN, GOLDEN GAMES, DEMOS ARE FOREVER, GLOBAL EXPERIENCE, GULP.
Please add 80p p&p per order.
Ring Now for free Catalogue

CLASSIC AMIGA P.D Software

Phone for a FREE catalogue disk
0161 723 1638
SHOP OPEN
12-9pm DAILY

FULL RANGE OF CD ROMS & CD32's
HARD DRIVES / MEMORY EXPANSIONS
CD ROM DRIVES
GAMES NOW IN STOCK

11, DEANSGATE
RADCLIFFE
Manchester

40p FUTURE PD

- 1 or 2 free disks with every 10
- Highest quality DD disks
- Same day service
- 18,000 titles Inc. Aminet.
- For branded disks add 10p.

1-9=50p 10-39=45p 40+=40p
130 x 10 DISK PACKS - £3.40

3 FREE CATDISKS & 10 FREE DISKS
send 3 x 1st class stamps (P&P) for disks & voucher

10 DISK PACKS & 3 CAT DISKS £3.90
Please state your workbench.
Big Name Games 1 or 2 ● Star Trek Games
AGA Demos & Games ● Arcade Games AGA
Platform Games 1 or 2 ● Useful Utilities
Mixed Fonts ● Klondike Cardsets
..Plus another 150 Packs or choose your own theme for £4.40

Dept CUF, 12 Ranworth Road, Bramley, Rotherham, S66 25N

CHEQUES PAYABLE TO M.WOOD

ADULT CATALOGUE

24 page full colour catalogue only £2.95
(Redeemable against first order)
Call 01793 490988
Credit Cards Accepted
EPIC - Dept X, PO BOX 637, Swindon, Wilts. UK
• Strictly Over 18's only •

Convert your Amstrad COLOUR MONITOR £10

Our custom made leads will convert your old Amstrad Monitor to work with your Amiga giving a crisp R.G.B. colour picture & optional quality amplified stereo sound.

	DIY	MADE
464/6128 (CTM644/0) Picture Only	£6	£10
464/6128 (CTM644/0) Inc Stereo Speakers	£31	£40
464/6128 PLUS (CM14) Inc Sound	£9	£15
464/6128 Green (GT-65) Picture Only	£6	£10

Dept CU, Hagars Electronics,
127 High Street, Sheerness, Kent ME12 IUD
Tel/Fax 01795 663336
Money back approval P&P inc.
CQ/PO DELIVERY 2 DAYS

COMPUTER SOLUTIONS

AMIGA HARDWARE
SOFTWARE & ACCESSORIES
NEW OR USED
GOOD SELECTION OF GAMES
UPGRADES • REPAIRS •
P.D. SOFTWARE
SONY, SEGA, NINTENDO
UNIT 2, MILL LANE MEWS,
ASHBY DE LA ZOUCH, LEICS. LE65 1HP
Tel. (01530) 412983 & 413519

CHROMA

Tower Conversions
Tower Accessories
A1200 systems
Zip drives / CD ROMs
SVGA Monitors
Digital Cameras
NEW
MediaStation
Boxer-based Systems
Web Design & Bureau
01328 862693
chromanet@aol.com
http://members.aol.com/chromanet

ONLINE PD

PHONE FOR YOUR FREE 3 DISK CATALOGUE LISTING HARDWARE, PERIPHERALS & 17,000+ PD TITLES @ 75P PER DISK
TEL: (01704) 834335 or 834583
OR SEND 39p SAE
Fax/BBS: (01704) 834583
We also accept cheques, PO's & cash.
2 year warranty
56K Dynamode Fax Data Voice Modem only £99.99 plus £7.50 p&p
MODEM INCLUDES FREE STARTER KIT
75p p&p per PD order
75P PER PD DISK
WINNER OF AMIGA FORMAT GOLD AWARD
Every 10 disks ordered choose 1 FREE
Online PD, Dept CU6, Unit 5, Embassy Building, 51A Piercefield Road, Formby, Liverpool, L37 7DG

SHAC SECOND HAND AMIGA CENTRE

TEL: 01983 290003
A1200's FROM £119.19
SOFTWARE SALE
SPEND £15 OR MORE and get one title FREE worth up to £5
FREE UK MAINLAND DELIVERY
ALSO, HARD DRIVES, RAM EXPANSIONS, DISK DRIVES SOFTWARE ETC.
ALL AT REASONABLE PRICES
WE ALSO PURCHASE PERIPHERALS POA.
SEND SAE FOR LATEST LIST TO:
SHAC, 69 KINGS ROAD, EAST COWES, ISLE OF WIGHT, PO32 6SE
Tel: 0410 067525
Mail Order Only

Officially The World's Best Selling Amiga Magazine

CU AMIGA MAGAZINE

If you want to advertise in a 65mm x 50mm space for only £58.30 call Marianna Masters now on 0171 972 6727

Don't miss your chance to be seen in the world's most popular Amiga title

PD POWER 60p PER DISK

(DEPT CU), P.O BOX 1219, ASTON, SHEFFIELD S26 2XZ
Tel: 0114 2877261 • email:PDPOW@aol.com

WE STOCK OVER 10,000 DISKS ADULTS; UTILS; GAMES; EDUCATIONAL; MUSIC AND LOTS MORE TO PICK FROM!!!

BUY 10 DISKS PICK 1 DISK FREE. FOR ANY ORDER PLEASE ADD 75P P+P

FREE CATALOGUE FREE GAME FREE COPIER of our choice.
Freebies sent out with all first time orders, or send a S.A.E. to the above address

SPEND £10 or more on PD not inc p+p and pick ONE of the following FREE, Headcleaner, 100 Labels, or a Mousemat for only 50p. This offer only applies to NEW customers ordering from this ADVERT. This AMAZING offer closes 1st June 98.
• BE SURE TO ASK FOR ABOVE OFFER WHEN MAKING YOUR PURCHASES! - OR MISS OUT!!

ADULTS ONLY
Please state over 18
Adult Adv 1 (2)
Adult Adv 2 (2)
Adult Adv 3 AGA (4)
Adult Anim. (3)
Adult Jigsaws
Adult Samples WB2+
Adult Xmas WB2+(2)
Asian Babes AGA
Babes Bottoms AGA(4)
Best of the Breast AGA (5)
Big Boobs #1
Big Boobs #2
Big Bust Girls AGA (10)
Big Men AGA (5)
Blue Moon Maria
Bomb X
Cal Girls AGA (2)
Carla Graf AGA (3)
Celebrity Special (5)
Classic Pin Ups AGA (3)
Cruelist Blow AGA
Danni Minogue AGA (2)
Die Fickinger
Drew Barrymore AGA (3)
Drink and Drown
Erection Collection AGA (2)
Erotica-1 AGA (3)
Erotic Stories (2)
Escort & Fiesta
Exposed 1.3K (4)
Fairytales AGA
Flight Fantasy AGA
Flintstones 2Meg
Girls on Film
Global Overdose
Good Vibrations AGA
Hot Girls AGA (2)
Hustler Girls #1 (2)
Ingrid Jigsaw
J.A. Bust AGA
Jamie Lee Curtis
Kathy LLoyd
La Toya AGA (2)
Luvly Ladies AGA 1 (5)
Luvly Ladies AGA 2 (5)
Luvly Ladies AGA 3 (5)
Luvly Ladies AGA 4 (5)
Madonna Sex (3)
Manga-X #1 WB2+
Manga-X #2 WB2+
Manga Pussy Pack AGA (27)
Mayfair Beauties AGA (2)
Mega Maid
Naughty Numbers
Nursery Rhymes AGA
Page 3 Girls
Pam Anderson #1 WB2+
Pam Anderson #2 WB2+
Pam Barbwire AGA
Penthouse Hot No's W/B 2+
Pin Ups AGA (2)
Private Collection AGA (2)
Purity Test
Pussy pack #1 AGA (20)
Pussy pack #2 AGA (25)
Pussy pack #3 AGA (20)
Pussy pack #4 AGA (15)
Rainbow Sample WB2+
Red Hot and Irish (2)
"Sexy" Pack AGA (15)
Sexy Playmates AGA (2)
Sex Puzzle
Sexy Stars AGA (3)
Sharon Stone AGA (2)
Showering Girls
Slayer Steve's (3)
Spiders Stunners
Strip Poker (7)
Strip Pot AGA (2)
Sultry Babes AGA(2)
Susie Boobies AGA
Tetris Sex Special
Tina Small
Three Girls
Tutti Frutti
The Bride AGA
Utopia Cartoons 1.3k
Wendy Hamilton
Wendy Whoppers AGA
Wet babes AGA (2)
Wheel of Fortune
Whoppers AGA (4)

GAMES
Airport not AGA
Amiga Columns
Ami Tank
Amos Loadsamoney
Ant Wars (2)
Arcade Classics
Alien F.F WB2+
Assassins Games 1-255
Astro Kid
Battleships
Billy Burglar
Birdies WB+
Blasted
Boardgames Pack (5)
Bomber 2000 3D
Bomb Jacky
Booze-o-Meter
Breaking Heads WB2+ (6)
Breed 96
Bugmine 2
Bugmine 3
Bully's Darts
Captain Bonus
Captain Custard WB2+
Card Games
Card Games Pack (5)
Cashfruit
Chaneques WB2+ (2)
Charlie J Cool WB2+
Circus
Coarse Angler (2)
Curse of PC's WB2+
Cyberpet
Cybersphere
Death Row Quiz
Death Row Quiz WB2+
Depthcharge
Dogfight v1.1 WB2+
Dominoes
Donkey Kong
Donkey Kong AGA
Dr Mario
Dr.Strange WB2+
Duckblast
Dungeon Hero
Electric Trainset
Elevators
Eurotrotter WB2+
Fatman
Fayoh AGA
Fishy Fishy
Fishing Fun WB2+
Flight Control WB2+
Flyin' Tigers WB2+
F.N. Pool WB2+
Football Director
Fred the Frog WB2+
Fruitmania
Fruit Salad
Funpack Games (28)
Gal Empires WB2+ (2)
Games Galore (18)
Games Galore AGA (18)
Go Kart Mania WB2+
Gone Fishing
Gory Story
Gunfighter
Harry the Haddock
High Noon WB2+
Hit Tiles II WB2+
Holy Grail (txt adv)
Hollywood Trivia
Hot Columns AGA
Indycar WB2+
Insecticide
Int Cricket
Intermercs AGA
Int. Wrestling (2)
Jet Set Willy 97 WB2+
Kelloggs Express
Kelloggs Land 2meg
Kick It AGA
Knightwoode (adv)
Last Lap 2meg
Law Mine
League Soccer Cards
Lego Tetris
Logic AGA
Magic Cards WB2+
Mayhem
Marryampics WB2+
Megaball
Megaball v2
Monsters AGA
Mr Men Olympics (2)
Nebula
Nerdkill AGA
Nicky II WB2+
Onslaught WB2+
Pacman 3D WH2+
Pacman 96 AGA
Pengo WB2+
Physco Zone
Playpac AGA
Poker Mania
Pom Pom Gunner
Power Tetris
Power Pacman WB2+
Premiere Picks
Pro-Bingo
Pub Darts
Punter
Quackers WB2+
Quiksilva WB2+
Raise the Titanic
Red Dwarf Trivia
Red Dwarf Trivia 6 WB2+
Rockstar WB2+
Roulette
SB.Survivor WB2+
Scrabble
Scott Footie Manager
Scudbuster
Seven Realms ADV WB2+
Shangai Collection
Sheep Shooter WB2+
Silly Soccer
Slipstream AGA
Soccer Cards USA
Space Invasion II
Space Pack WB2+
Speccy Pack (34)
Spelltris
S.N. Snooker WB2+
Starbase 13 (2) (adv)
Startrek (2)
Startrekker WB2+ (2)
Super Ballz AGA
Super Combat III (2)
Super Skoda Chall.
Supermega Fruits
Target Shoot WB2+
Taskforce
Therapist
The Shepherd
Top of the League
Total Wars
Trains WB2+
Wally World (2)
War (strategy)
Wibbly World Giddy
Wordchamp AGA HD
W.O.F Football
Xmas Theme Park
Yatcy WB2+
100 Games Pack (7)
21 Games not AGA
18 Hole Golf (2)
2 Unlimited Tetris

EDUCATIONAL
Ask Me Another
Artistix
Animal Land #1
Amos Language Tutor
A-Z Paintpot
Amiga Beginner
Alpha Recognition WB2+
Back to School (3)
Basic Amiga Tutor
Battle of Britain (2)
Car Drive Tutor WB2+
Chess Helper v1.3
Communicate
Count & Spell
Colour It
Discworld Trivia AGA
D.Paint Tutor
D.Paint Guide
D Paint 4 Buddy (2)
Electronics Vs.0 WB2+ (3)
Error Info
Evolution
Fireworks Alphabet
Felliguily
French Verb Tester
Gas Turbine Engine
GB Almanac
GCSE Maths
GCSE Maths Exam
German
Global Facts 2meg (2)
Guide to Computers (2)
Guide to the Net
Highway Code
Illusions
Invisible World
I.Q. Test
Japanese Tutor
Kids Disks #1
Kids Disks #2
Kids Disks #3
Kids Disks #4
Kids Disks #6
Kids Disks #7
Kids DTP (2)
Kids Paint
Kid Pix
Kids Songs #2
Kids Stuff
Learn in Space
Learn & Play #2 (2)
Little IMPS WB2+
Maths Adventure
Maths Drill
Match with Humpty
Maths Master
Ming-Shu v3.33
My First Pony (2)
Paint It
Personality Analysis
Petrol Engine
Read & Learn #1 (2)
Revision Master
Rock-A-Doodle
Rome
Science (4)
Simon Says
Spanish Translator
Steam Engine
Stirling Engine
Tarot II (2)
Tell the Time
Titanic II WB2+ (2)
Tom's Story Book
Travel Guide (2)
Turntables WB2+
Tutankhamun WB2+ (2)
Typing Tutor
Weather
Weather Guide (3)
World War II
World Geography
World History Book
World Almanac
Wordplay

BUSINESS
Account Master v3
Address Print
Amiga Fox DTP
Amibase Pro
Asi Label Printer
Asi Office Helper
Business Letters
Qbase & Spread
Dear Diary
Easycalc
Edword
Forms R Unlimited
Home Accountant
Last Will & Test
Little Office
On Form v1.1
Personal Diary
QED
Text Plus v3
Text Engine v3.0
Visicalc

UTILITIES
Adobe Fonts (15)
Amigados Tutorial
ASI Disk Helper #1
ASI Disk Helper #2
ASI Multiprint #3
ASI Multiprint #4
Award Maker
A600 H/D Prep
A1200 H/D Prep
Blue Rose Fonts
Citizen Drivers
C-Manual (12)
Coppiers Unlimited (2)
Cruch Mania (2)
Disk Maker
Disk Repair Kit
Font Farm (5)
Football Icons
Form Maker
Freepaint
Hard Disk Tools #2 (3)
H/D Stacker
H/D Game Install v2
Home Inv. Man.
HP600 Printer Drives
Hypercat
Icon Archive h.drive (3)
Icon Manager
Latest Libs WB2+ (5)
Lockpick v2
Lottery Checker
Magic WB. v2.1 h.drive
Mannys Printer Drives
M.Cad v1.2
Menumaster v3
Messy Sid v3
Mixed Imagine Objects (9)
M.U.I 3.8 H.Drive (2)
North C 1.3 (2)
People Tree not AGA
PM3 Editor
Print Master
RD Prep
Resume Writer v3
Sleepless Nights
Startrek D'base (6) (H/D reqd)
The Grinder
The Prophecy
Virus Killers #4 (2)
WB2 Emulator
Word Search Des.
Wordsworth Fonts (33)
100 Printer Drives
1.3 Kickstart WB2+

MISCELLANEOUS
Aliens Multimedia AGA(9)
Asgards Cheats (3)
Alternative Science (3)
Amiga Beginner (5)
Backdoor v2.81
Cheats Disk 5
Cheatlist v3.06 (2)
Cult T.V. Debase II (2)
Disney Clips
Dogs (8)
Dr Who 30thWH2+(5)
Games Help Disk
King James Bible (4)
Mega Cheats
Mystery of Runes WB2+
Magic Tricks
Nostromo Cheats
O.J Simpson
Red Dwarf Mag #1
Star Trek Voyage AGA
Startrek TNG (2)
U.F.O. (2)
UFO The Truth (2)
UFO Encounters (6)
X-Files Guide
100 Demo Pack (6)

MUSIC
Bangles
Crossing over WB2+
Doctorin the Tardis
Drums and Pipes
Flash Gordon (2)
Friends of Paula (6)
House Samples (3)
I'm Too Sexy (2)
Joe Le Taxi
Jesus on E's (2)
Modulation (10)
Music Box
Pet Shop Boys
Popeye N B/Boys
Rock Mods (5)
Sonic Drum Kit v2.1
Startrek Themes (2)
Tiffany

CLIPART
Actors
Aircraft (3)
Astrology (2)
Banners (2)
Beast & Myths (3)
Birds (8)
Borders (2)
Buildings (5)
Cult T.V. Debase II (2)
Fish (4)
Food (2)
Flowers (11)
Horses (2)
Houses (2)
Insects (4)
Kids (2)
Lion Kings (3)
Mammals (8)
Maps (10)
Men (2)
Military (10)
Prehistoric (2)
Punch (3)
Religious (3)
Reptiles (3)
Schools (2)
Teddy Bears (2)
Travel (2)
Transport (3)
Trees (6)
Vegetables (4)
Weddings (2)
Women (2)
Xmas (5)

KLONDIKE A1200 ONLY
Klondike AGA (3)
Klondike II H.D.REQ (3)

CARD SETS FOR KLONDIKE
Anna Nicole (Adults)
Babylon 5
Bathing Beauties 1
Batman-Phantasm
Batman Forever
Batman & Robin
Batman and Anim
Beauty (Adults)
Beavis & Butthead
Big Baps 1 (Adults)
Black Adder 1
Black Adder 2
Body Shop 1 (Adults)
Body Shop 2 (Adults)
Body Shop 3 (Adults)
Busen (Adults)
Buxom (Adults)
Cameron Diaz
Cindy Crawford
Dr.Who
Disney
Deep Space 9
Empire Strikes Back
Erotica (Adults)
Extasy (Adults)
Female (Adults)
Helena Christenson 1
Helena Christenson 2
Hired Girls (Adults)
Jennifer Aniston
Manga Mania X (Adults)
Nightmare B4 Xmas
Pam Anderson
Pretty Woman
Return of the Jedi
Space Cards
Star Trek
Star Trek TNG
Star Wars
Venus (Adults)
Voyager
X-Dos (Adults)

AGA = 1200 only. WB2+ = Not A500. All titles are on ONE disk unless otherwise stated in brackets. This is only a small selection thats available from US - LOTS, LOTS, LOTS MORE AVAILABLE!

PLEASE MAKE CHEQUES/P.O.s PAYABLE TO R. LLOYD FOR ORDERS OF TWO POUNDS OR BELOW. WE ACCEPT STAMPS.

PAY BY CREDIT CARD AND GET A FREE CDROM: CALL NOW FOR DETAILS

FORE-MATT
Home Computing

DEPT.CU, PO BOX 835, WOOTTON BASSETT, WILTSHIRE SN4 8RX TEL: 01793 853802

Public Domain/Shareware/CD-ROM/Commercial Software/Hardware

FREE CATALOGUE DISK
PD / Shareware from only 50p/disk

SPRING **SALE**

A WHOLE WORLD OF AMIGA SOFTWARE

CDROM				DISK			
Akira	£4.99	Aminet Set 4, 5, 6 ea	£27.99	Acid Attack	£12.99	Pinball Mania AGA	£6.99
Assassins Games 2	£13.49	Animations (Dbl)	£14.99	Arcade Action	£12.99	Player Manager 2 Extra	£9.99
Assassins Games 3	£16.99	Arcade Classics+	£14.99	Badlands Pete	£3.99	Police Quest	£9.99
Big Red Adventure	£19.99	Artworx CD	£8.99	Base Jumpers	£4.99	Power Drive	£9.99
Bubble and Squeak	£2.99	BCI Music/Mods	£8.99	BBC Playdays	£8.99	Railroad Tycoon	£12.99
Cannon Fodder	£9.99	Clip Art	£7.99	Blade	£14.99	Roadkill	£4.99
Chuck Rock	£2.99	Deluxe Paint 5	£18.99	Bograts AGA	£12.99	Road Rash	£8.99
Civilization CD	£12.99	Emulators Unlimited	£14.99	Breathless AGA	£13.99	Ruffian	£4.99
Computer Pets	£4.99	Epic Encyclopedia	£9.99	Bubble & Squeak	£9.99	Sci-Fi Collection	£7.99
Doom Trilogy	£19.99	Euro CD vol 1	£9.99	Burnout AGA	£16.99	Silent Service II	£14.99
Fears	£6.99	Fonts CD	£8.99	Cannon Fodder 1 or 2 ea	£8.99	Simon the Sorcerer	£14.99
Final Odyssey	£27.99	Gateway vol. 1	£9.99	Capital Punishment	£24.99	Simon the Sorcerer AGA	£14.99
Flyin High	£19.99	Graphic Sensations	£12.99	Civilization	£14.99	Skeleton Krew AGA	£4.99
Guardian	£2.99	Hottest 6	£16.99	Colonization	£14.99	Slamtilt AGA	£15.99
Gulp	£2.99	Illusions in 3D	£8.99	Daily Dbl Horseracing	£4.99	Star Trek 25th Anniversary	£19.99
Legends	£8.99	Insight Dinosaurs	£4.99	Desert Strike	£8.99	Super Streetfighter 2 AGA	£14.99
OnEscapee	£27.99	In-To-The-Net (Dbl)	£9.99	Dune II	£12.99	The Lost Vikings	£9.99
Pinball Illusions	£13.99	LSD 1, 2, 3 ea	£9.99	Dungeon Master 2	£9.99	Theme Park ECS or AGA	£13.99
Simon the Sorcerer	£14.99	Meeting Pearls	£7.99	Enemy	£14.99	The Speris Legacy	£14.99
Strip Pot (18)	£2.99	Multimedia Backdrop	£14.99	Exile ecs or aga	£9.99	Thomas' Pinball AGA	£9.99
Super League Manager	£2.99	Multimedia Toolkit	£5.99	F117A Nighthawk	£8.99	Time Keepers	£12.99
Theme Park CD	£12.99	Multimedia Toolkit 2	£19.99	Flashback	£9.99	Tiny Troops	£16.99
The Strangers AGA	£19.99	Network CD	£6.99	Gloom Deluxe (020)	£4.99	Touring Car Challenge	£8.99
Total Carnage	£2.99	Network CD 2	£9.99	Guardian AGA	£4.99	Turbo Trax	£9.99
Ultimate Gloom	£12.99	NF/A AGA Experience 2	£9.99	Gunship 2000	£14.99	Valhalla 1	£14.99
Ult. Super Skidmarks	£12.99	Octamed Soundstudio	£7.99	Hillsea Lido	£12.99	Valhalla 2	£14.99
Uropa 2	£24.99	Oh Yes More Worms	£6.99	Jet Pilot	£15.99	Valhalla 3	£14.99
Vital Light	£2.99	Pandora's CD	£2.99	Legends	£6.99	Wembley Int'l Soccer	£11.99
17 Bit Phase IV	£8.99	Personal Suite	£4.99	Lemmings	£8.99	Wembley Rugby League	£11.99
17 Bit 5th Dimension	£14.99	Scene Storm	£2.99	Manyk Mayhem	£13.99	Wing Commander	£9.99
17 Bit Level 6	£14.99	Sounds Terrific 2 (dbl)	£14.99	Minskies	£8.99	World of War	£4.99
3DCD-1 Objects	£8.99	Speccy Sensations 2	£13.99	Myth	£3.99	Blitz Basic 2.1	£19.99
3DCD-2 Images	£7.99	System Booster	£8.99	Overlord	£14.99	Info Nexus/2	£4.99
Aminet 10, 15, 16 ea	£7.99	The Colour Library	£9.99	PGA Tour Golf	£8.99	Inter Base 2.0	£4.99
Aminet 18-23 ea	£10.99	The Learning Curve	£18.99	PGA Tour Golf Plus	£13.99	Mini Office	£19.99
Aminet Set 1, 2, 3 ea	£15.99	Zoom 2	£17.99	Pinball Brain Damage	£18.99	MultiMedia Experience	£7.99

Mega CD Bundle *(Demos are Forever/Soundstudio/Scene Storm/Akira/Gulp/Pandora/Insight Dinosaurs/Golden Games) £29.99*

3 1/2" Drive Cleaning Kit £1.99 -- Turbo Joystick £9.99
Blank Disks: Grade "A" 30p each -- Ex S/W House 20p each

Many more titles in stock *ONLY £1.00 p&p per title on UK orders*

SELECT SOFTWARE

TOP QUALITY DISKS & SERVICE
- 3 FREE disks per £10
- FREE spare labels
- FREE 1st class P&P same day service
- FREE Disk Boxes
- Only branded disks

PHONE FOR FREE CATDISK
- All virus free and beginner friendly
- Only very best titles & latest versions sold
- Guaranteed - No quibble replacements

A1200/A4000
- X-Fighter AGA Street Fighter (3)
- Zero Gravity 3D AGA (1)
- Leading Lap Racing AGA (1)
- Alien Formula 1 Racing AGA (1)
- D.Pacman AGA Full Version!
- Rocketz 2.28 AGA
- Ampu Worms Clone (2)
- Ariel Racers Skidmarks (2)
- Slipstream 3D Game Demo
- New WB3 Beginner Guide
- HD Click 3
- SwazBlanker 2.7 AGA
- RD's Datatypes
- Iconian 2.98s AGA 90%
- D.Galaga 2.6C AGA 100%
- Diamond Caves Latest (2)
- Cybertech AGA (2)
- Klondike AGA Floppy (3)
- Klondike AGA 4 (4) (hd)
- Samurai Showdown AGA

WB2+ UTILS
- Diskmaster & Guide 2.2b (1)
- IDEFIX 97 latest
- Image Studio 2.2 (2) (hd) 90%
- Menus & More 3.22 93%
- Reorg3.11 & Disksalv 2
- Virus Xtruder Latest
- Filequest Dopus Clone
- PowerdataPro HD doubler
- XPK Libs and Tools
- Executive 2.1 (2) (hd) 95%
- MCP Latest (2) 93%
- Toolsdaemon 2.1a

MUI UTILS (WB2 +)
- Tool Manager 3 Kit
- MUI 3.8 and DevKit (2)
- MUI on floppy-hd not req'd (3)
- RO Filemanager1.29 84%
- Screentab 3.2
- Start Menu 2
- Windoze Progs & More
- RD's MUI Utils 33
- RD's MUI Utils 34
- MUI Video Titler 2.1
- MUI Rexx 3.0A 94%
- Fiasco 2.1 Database (2) 95%

WB2 + GAMES
- D.PacmanECS Full Version!
- Poing v5 Final (1)
- Kick It (90%)
- MegaTyphoon 91%
- Statix 89%
- Psycheual 98%
- Rebouldix
- Slider 92%
- Torque 87%
- Deluxe Galaga 2.6 100%

UTILS ETC - ANY 1MB
- TextEngine 5 Word Pro
- Snoopdos 3
- Wordworth Fonts (5)
- Panasonic Print Driver
- Star Printer Drivers
- Pro Printer Drivers

ART, MUSIC ANY 1MB
- Junior Picasso
- Disney Colour Clipart (2)
- Spectrapaint 3.1
- RD's Sound Samples (3)
- RD's Instruments (2)
- Star Trek Rave Demo
- Octamed v5 (WB2+)

GAMES - ANY 1MB
- Lemmings Arcade Game (1)
- Super Combat 3 (2)
- Sovereign Slots Fruit Machine (1)
- Astro Kid
- Blasted Shoot em up
- Super Foul Egg (Puyo)
- M&S Tetris Compilation
- Megaball v4 (3)
- M&S Puzzlers Comp
- M&S Blaster Comp
- Pinball Fantasies Demo
- Breed 96 SimCity 1.3
- Total War 1.9
- Real Chinese Majong
- Super Skiddy 3 85%
- Wheel Chair Gladiators
- Wally World (2)
- Coarse Fishing (2) 100%
- Antwars 1.9
- Cosmic Racer
- Chaneques (2)
- M.A.S.H.
- Kung Fu Charlies
- Solo Assault

EDUCATIONAL - ANY 1MB
- Star Trek Guide
- Star Trek Games Pack (10) £5!
- Barney Goes Camping (2)
- Octamed 5 Tutor (4)

ICONS & BACKGROUNDS
- Magic WB 2.1 p (2) (WB2+)
- Magic Workbench 1.3
- Newicons 4.1 (2) (WB2+) 90%
- AES Newicons 7, 8 & 9
- Newicons Backdrops
- Magic WB Extras 12 (2)
- Magic WB Backgrounds (2)
- Star Trek Workbench Set (8) £4!
- Iconographics v3 (3)
- Iconographics More Icons

ALL DISKS £1 • AMINET from 25p • 10 DISK THEMED PACKS £5 • Cheques payable to M.Wood, Dept CUS, 12 Ranworth Road, Bramley, Rotherham, S66 2SN ORDERLINE: 01709 530 569

CU AMIGA MAGAZINE

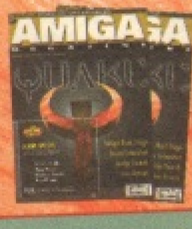
is now the worlds No.1 selling Amiga magazine

Our readers are loyal Amiga enthusiasts ready to spend money...don't *you* want some?

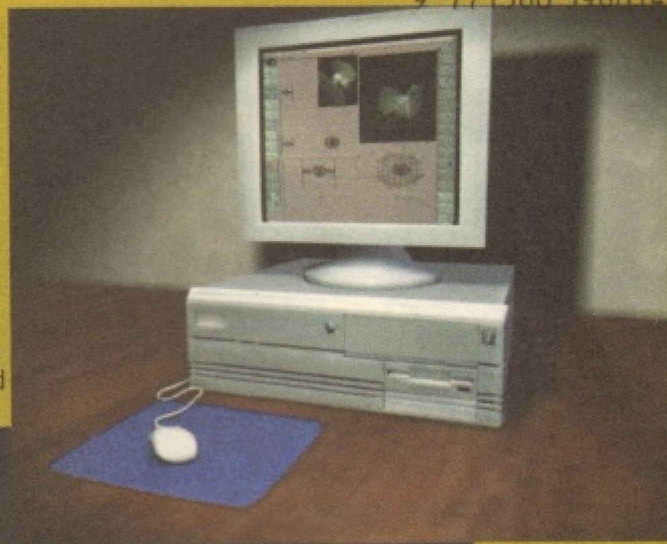
Share in our success and profit your business



To advertise in CU AMIGA call Marianna Masters on 0171 972 6727



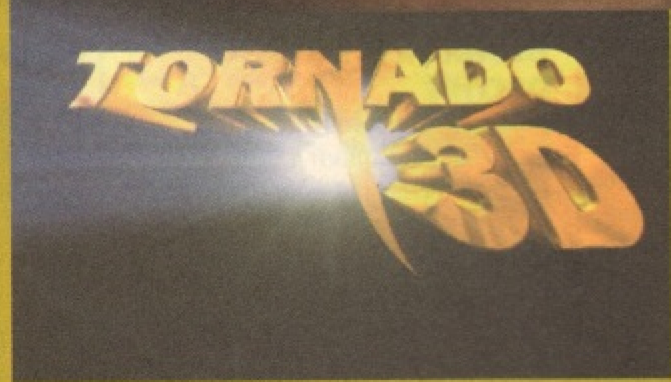
Next Month



Big News!

Next issue will come complete with some rather large news from the horse's mouth (that's Amiga Inc to you and me). At the time of going to press we're still not sure what it is, so we can't promise you it's finally going to be time to crack open that bottle of lemonade and liberate the suspiciously soft marshmallow biscuits. However, we are assured it's going to be BIG news this time, so, lining ourselves up for another big anticlimax we've bated our breath (whatever the hell that means) and sat up in anticipation like a puppy waiting for a bone from his master. All will be revealed next month!

Plus: Genetic SpeciesThreatening to come from behind and usurp the mighty Quake, Vulcan's 3D blaster will be getting the full review treatment.



Tornado 3D

Another late entrant into the stalls, Tornado 3D is hoping to steal Lightwave's crown. A tall order that could be more realistic than it sounds!

CU Amiga – July issue on sale 11th June

CU AMIGA MAGAZINE

ISSN 1360-5968

Don't Miss An Issue!

Fill in the form below and hand it to your newsagent, taking care to specify whether you require the CD or floppy disk edition.



"Don't you just hate it when you can't get your hands on the latest issue of CU Amiga? Make sure you don't miss a single issue of the world's best Amiga magazine by placing a regular order for CU Amiga with your local newsagent".

Dear News Agent, please order and reserve me the next issue of CU Amiga Magazine.

Name:______________________________

Postal address:______________________________

____

____

Telephone:______________________________

I require the following edition: (please tick)

☐ Floppy Disk Edition ☐ CD ROM Edition

CU AMIGA MAGAZINE

Q&A

Don't worry how complicated your technical problem is, challenge our panel of experts and they'll try to fathom it out. Please don't forget to provide us with as much detail on your systems and problems as possible, to help us solve things for you.

Logos

Mysteries and meanings ...

WORKBENCH – Solutions to those everyday troubles with your Workbench.

EXPANSION – If you need help getting more from your Amiga, just ask!

COMMS – All your Internet and general comms problems swiftly solved.

SOUND – Trouble making your Amiga sing? We've got the answers here.

HARDWARE – Technical matters beyond the scope of plug-ins and plug-ons.

SOFTWARE – Answers to queries on particular pieces of software.

HELP – General queries which just don't seem to fit in anywhere else.

CD-ROM – Specific help with CD-ROM solutions and driver problems.

GRAPHICS – Problerps with art and design? Help and advice is at hand.

PERIPHERALS – Printers, monitors, we'll solve your peripheral blues for you.

Breaking the 4Gb barrier

I recently bought a Quantum 4.3Gb replacement hard drive for my Amiga. I rushed home with it, plugged it in, ran HDToolBox, chose the 'Read configuration' button, and it said that the size of the drive was 14Mb.

With some tweaking of the values, I came to the conclusion that HDToolBox 'wraps around' at the 2Gb mark before entering negative values. So I kept those values (for want of any other solution) and so far so good, except I have a 2Gb hard drive rather than 4.3Gb.

So how do I format my new baby to its full 4.3Gb capacity?

Shay Riggs, Cambridge

This problem is caused by the fact that AmigaDOS locates the blocks on a disk by using a 32bit address. Consequently, the maximum number of blocks is 2^32, which works out as 4Gb. Some utilities even treat this 32bit number as signed, that is plus or minus 2Gb.

The upshot of all this is that AmigaDOS doesn't support disk sizes greater than 4Gb and in fact it is safest to keep disk partitions smaller than 2Gb. However, all is not lost: there are several software patches available which work around this limitation.

Try, for example, FFSTD64 (which should be on this month's cover CD) or giga.device. Also, Amiga International have a beta version of a fixed file system without the 4Gb limit which can be downloaded from their web-site (it would be safe to bet that this will be a feature of OS3.5 when it appears).

As these solution are patches (or hacks), it must be remembered that they do not guarantee 100% stability.

Sourcin' chips

I purchased a cheap, second-hand GVP 1230 accelerator for the Amiga 1200. The accelerator has 2 x 64 pin SIMM sockets. What sort of memory does this accelerator take? Is it possible to buy 64 pin SIMMs?

A. Nonymous, Bristol

Unfortunately, you have to use GVP's own brand SIMMs in their accelerators – the 64 pin variety coming in 1, 4 or 16Mb sizes. As to where to buy them, I suspect your best bet would be to try to get them second-hand.

GVP are still in existence and you could buy direct from them in the States – but this would be expensive. You can check out GVP's web-site at http://www.gvpm.com/.

Ghost in the machine?

I own an A1200 with a Blizzard 1230 IV accelerator which has 8Mb of fast ram on board. I also have a 1.2Gb hard disk and an extra external floppy drive. In order to play a game, Desert Strike, I had to disable the accelerator so it would run properly. On reset I held down the number "2" to disable the accelerator and unfortunately (though this is not the problem) the hard disk for some reason disappears from the system.

Now on to my problem (if you could call it that). I held down the reset keys for 6 seconds to re-enable the accelerator (and the hard disk) and something weird happened. Workbench appeared to boot as usual but did not. Instead the screen turned black and a blue banner appeared. In the centre of this banner the MagicWB logo appeared (the triangle like thing with the picture of a mouse pointer in the centre of it).

Then a deep synth-like sound was played which gradually got quieter and quieter and the "Dolby SurroundSound" logo appeared in the bottom left hand corner of the banner. The screen faded and my Workbench loaded as normal with no errors. I want to know what it



▲ Haunted Workbench or Trojan Horse? You've heard the facts, now decide for yourself.

was and how I can make it happen again. I believe it was some kind of MagicWB program but as I cannot find the program which does this in any of my hard disk directories I am slightly worried. Though, perhaps it was a virus *or* some kind of *Artificial Intelligence* (maybe my Amiga has become self aware, or maybe not) I do hope so.

Anyway I also checked the start-up-sequence and user-startup but there was no trace of this program. I am being perfectly sincere and this DID happen. Please believe me.

Mintlaw, via e-mail

Calm down – I believe you. The same thing has happened to me, and the first time it happened I was rather surprised, too.

Unfortunately, your Amiga has not become spontaneously self-aware. It is in fact caused by the MagicWB pen daemon which is installed into your startup-sequence by the MagicWB package. I don't know what triggers it to display the logo and play the sound; since it happens only every so often, it is probably random.

The sound sample that is actually played can be found in the s drawer on your system disk and is called mti.data. You can play this with, say, the Play16 command to convince yourself that your Amiga is not alive. My advice to you is to get rid of MagicWB and install NewIcons instead. It is far less spooky and much nicer to look at it. By the way, when submitting a question via email, please sign your name on it: it is difficult to decipher some of the more cryptic user IDs.

The end of the line

I have an A1200 tower with a Squirrel SCSI device connected to a CD-ROM drive, 2 hard drives and a tape streamer.

1. Does the ZipPlus drive have built in termination?

2. Does termination of a SCSI chain have to be the last physical device (ie; the one furthest from the controller), or the device with the highest ID?

3. My Squirrel transfers data at about 1.2 – 1.4Mb per second, but takes up 100% CPU time (AIBB). Is this because it's not DMA (direct memory access)? If I fit a SCSI interface to my Apollo, will it hog less CPU time?

Mark Sudlow, Cheshire

1. Yes. The Zip plus is a rather clever version of the normal Zip drive. It is clever in that it can be connected (although not simultaneously) to both PCs via a parallel interface and to Amigas and Macs via a SCSI interface. It automatically detects by which interface it is connected and acts accordingly. It also features automatic termination.

2. SCSI chains must be terminated at both ends, that is, the first and last devices must be terminated. The SCSI interface itself is considered to be the first device in the chain and will have termination built in. The last device must be terminated in some fashion – if it is an external device it will usually have some form of switchable or automatic termination built-in.

3. Probably not. The Squirrel is a slow SCSI device mainly because of the poor bandwidth of the PCMCIA slot. And the fact that it is non-DMA means that it steals all the CPU's time during SCSI access – resulting in the computer grinding to a halt.

The Apollo SCSI interface is unfortunately no solution. Unlike the phase5 add-on, it is not a true DMA device and performs poorly. You would probably be better off staying with your Squirrel for just now.

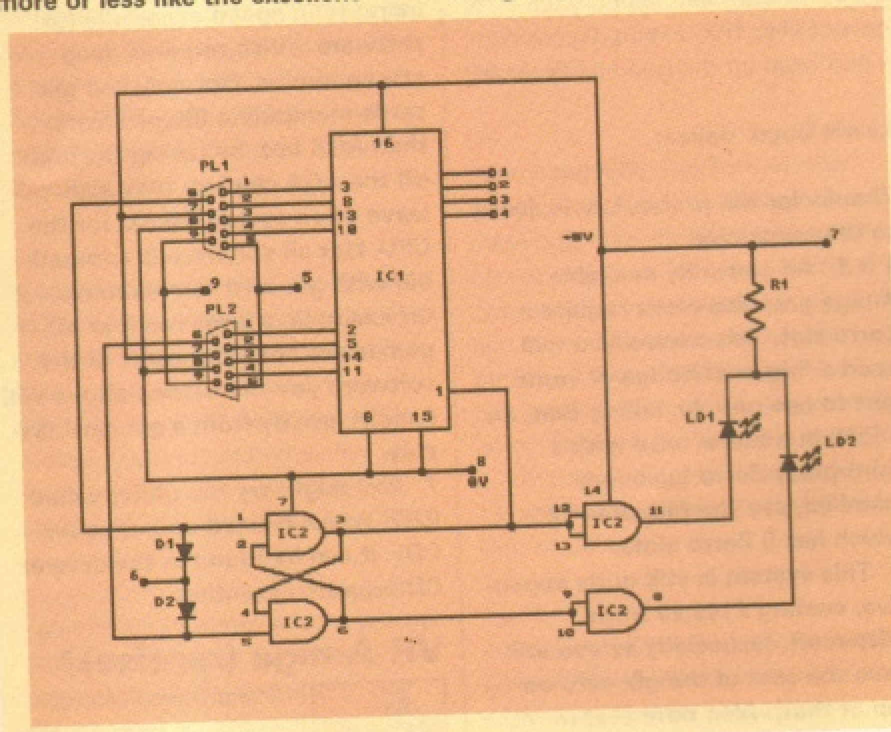
Tech Tip: Joystick port sharer

The following circuit was submitted by Craig. CU Amiga Magazine has not tested this circuit, and so cannot be held responsible for any damage caused by building and using it.

The Sticky Box

When was the last time you wanted to play a two-joystick game before discovering you had to fiddle around unplugging the mouse? It was during one of these moments that I came up with the idea for this design. Functionally speaking, it works more or less like the excellent Roboshift by Steve Collins, although his design does have a few improvements over this one. Most notably, it always defaults to the mouse port and the whole thing is built with ultra-compact SMT components. The Sticky Box is fully automatic so you simply just have to press fire switch over to joystick, or click the mouse button to switch to mouse (just like the Roboshift).

The main advantage that the Sticky Box has over Roboshift is that it's seven quid cheaper. While Roboshift is only available commercially for about £17, this design can be bought for less than a tenner and is perfectly suitable as a first time construction project. Even if you have never wielded a soldering iron before, this project is simple enough for almost anyone.



Construction

Building the Sticky Box is a simple matter of 'stuffing' the PCB/Veroboard and wiring the flying 9-pin socket. Two points are worth noting: pin 1 of IC1 and IC2 (marked with a notch) face towards the D connectors. Also, take care when wiring the flying 9-pin D socket: the lead spacing is quite tight and you will need a small (typically 17 watt) soldering iron to do the job. A magnifying glass is helpful to read the pin numbers, too.

What you will need

IC1 – 74LS157
IC2 – 74LS00
D1, D2 – 1N4148 Switching diodes
LD1 – 5mm LED (10mA) Green
LD2 – 5mm LED (10mA) Red
R1 – 1K5 0.6W Metal film 2%
PL1, PL2 – 9-pin D socket
PL3 – 9-pin D socket (in-line)
Cable – 1/2M either 9x7-core with screen or 10-way ribbon
Veropins – 9 off
IC Sockets – 14-pin DIL x 1, 16-pin DIL x 1
Case To suit

Old games

Is it still possible to get hold of a copy of The Secret of Monkey Island Two – one of the greatest games of all time that I unfortunately don't have. Great mag by the way and cheers.

Andy T, e-mail

We get many queries like this. The answer to all of them is simple and the same: try contacting a software distributor like Epic Marketing (Tel. 01793 490988) or Alive Mediasoft (Tel. 01623 467579).

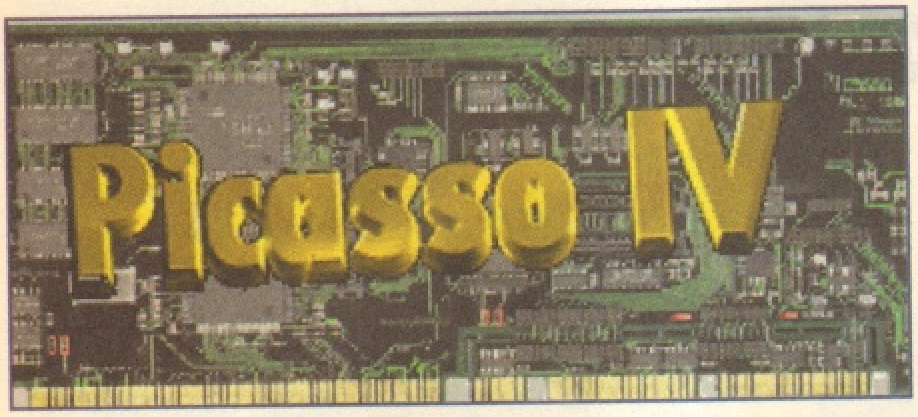
A brighter Workbench

This is driving me mad! No matter what I try to do, including installing NewIcons, I cannot seem to bring colour to my workbench. Even background pictures come out in those "restful" four-colour combinations.

True, I can use Prefs to change the four colours, but what happened to technicolour glory? I'm either missing something, or I am doing something terribly wrong. Help!

Doug Harvey, Northampton

I always like to do my bit to save the sanity of our readers. The solution to your problem also lies in the Prefs drawer and is called ScreenMode. Double-click on this and you will be presented with a requester. In this requester will be a gadget called colours which can be used to alter the number of colours on the Workbench screen.



▲ The agony of choice. Option one, the Picasso IV

Click Save to make the changes permanent. If you have an unexpanded Amiga, it is probably best to use only 8 or 16 colours; any more and the screen will consume too much memory and will slow the system down. With a fast processor 64 colours in AGA is quite useable.

A1200 and gfx cards?

EXPANSION

I have seen many adverts in your magazine for Zorro slot graphics cards, and I am considering buying one.

However, I have several questions and problems which I hope you can answer. Currently, I have an A1200 with a GVP 68030 accelerator (+FPU), a CD-ROM drive and a Zip drive (both SCSI connected via a Squirrel) and an old Commodore 1084S monitor. The CD drive and Zip are installed in a HiQ mini tower, but I have no Zorro slots.

1. Do graphics cards have to be connected via Zorro slots, or can you get cards which can be connected to the parallel or series port, or even SCSI?.
2. Can I buy a Zorro slot to put into my tower case to use a graphics card? If so, where can I get hold of one, and how much will it cost?.
3. Which graphics card is better – Cybervision 64-3D or Picasso IV?
4. How much do they cost?
5. Will a graphics card fix the flickering experienced with my current monitor in interlaced screen modes? I have seen things called "flicker-fixers", will I have to buy one of those as well as a graphics card?
6. Will the graphics card improve the speed of all applications requiring complex graphics/screen modes ie; Imagine, PPaint, Photogenics, Workbench and games such as TFX and Doom, or do I need special versions of the above titles?
7. Finally, one question, not related to graphics cards: How can I get Workbench to run certain file types (such as MIDI, IFF, JPEG etc.) using particular programmes (such as GMPlay, Visage etc.) when I double click on the files' icons?

I have subscribed to your magazine for several years now, and I have to say I think it is the Best Amiga magazine. Thanks for putting excellent programmes on your cover CD's: TFX, PPaint, Doom etc. – and keep up the good work too!!

Lewis Boyd. Belfast

Thanks for the praise, Lewis. Now, to the questions!

1 & 2. All currently available Amiga graphics cards require a Zorro slot. This means you will need a 'big box' Amiga of some sort to use one, or, failing that, an A1200 in a tower case with a third-party Zorro busboard installed, say the Micronik Z2 which has 5 Zorro slots.

This system is still quite expensive, costing £149.95 from Blittersoft, (especially as you will have the cost of the gfx card on top of that). Also note that it requires various connecters to be soldered and attached to the 1200 motherboard for full compatibility with Zorro graphics cards. Also, Eyetech (01642 713185) sell an adaptor for £99.95 which allows a single Zorro card to be plugged into an A1200.

However, things are about to change: phase 5 have a graphics card in development which plugs directly into their PPC accelerators (thus not requiring Zorro); and Ateo Concepts are developing an alternative, non-standard and cheaper bus interface system for the A1200 complete with a range of their own cards including a graphics card, Pixel64.

Both these system should be ready for release soon.

3 & 4. It is a matter of personal choice which card you think is better. Personally, I prefer the PicassoIV. The PicassoIV costs £249.95 and is available from Blittersoft (01908 261466). It is more expensive, but is based around a more modern chipset, there is a useful range of plug-in modules, such as a 16bit sound card, a video encoder and TV module, and it has a built in flicker fixer. The Cybervision64/3D costs £144 from White Knight (01920 822321). It does require an external scan doubler but, on the plus side, features a 3D graphics engine – which is sadly under-used on the Amiga.

5. The PicassoIV has a built-in flicker-fixer and so can display all Amiga screenmodes and its own modes on an SVGA monitor. The Cybervision requires an external Scandoubler module to be able to display native Amiga screenmodes.

6. Yes. You will notice a big increase in speed especially for software which requires deep screen modes. Not only can gfx cards manipulate images faster than AGA but, by taking the load off the AGA chipset, they also leave more system cycles for the CPU. Not all software is compatible with gfx card screenmodes – for example, a large number of games are not – but most of the software you mentioned above will benefit greatly from a gfx card display.

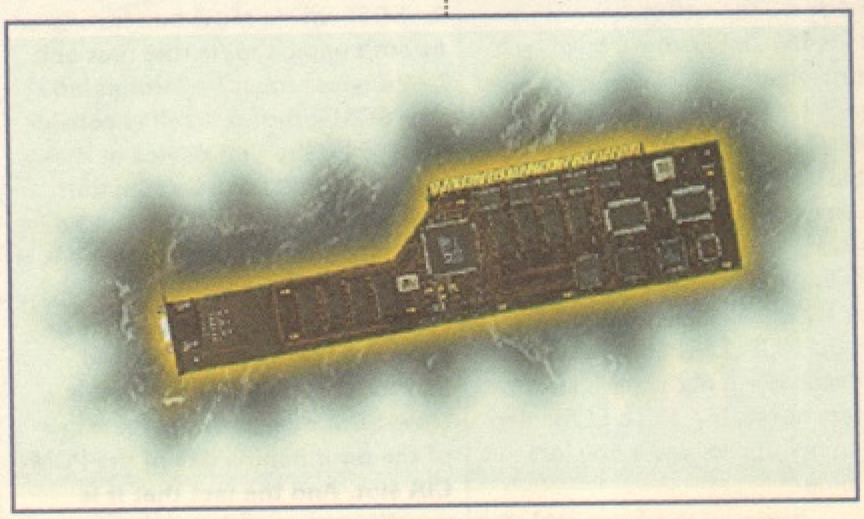
7. You might try the utility called IDER which is used on our cover CDs. It can be found in the drawer CDSupport/Essentials.

VR Amiga (reprise)?

PERIPHERALS

I have a boxed Mattel Powerglove here which I've only used a couple of times since purchase in 1991. It is complete with all cables, glove, instruction book and sensors for TV. If Karl Gronnenberg or indeed anyone else for that matter is interested they can email me at this address: tristan.fletcher@severed.overflow.com

Tristan Fletcher, via e-mail



▲ Option two: The CyberVision 64/3D

Save my Overdrive!

PERIPHERALS

I'm writing with a long overdue question, as my A1200 has remained unexpanded for too long.

The only additions to it at the moment are an extra 4Mb of RAM, and a 540Mb Overdrive hard drive – which seemed like a good idea at the time, but now CD-ROMs and modems are getting cheap (and essential) it doesn't seem quite so clever. So, without wasting my existing hard drive, how can I best fit a CD-ROM and modem, preferably with the minimum cost and hassle, with my PCMCIA slot already in use?

I notice the Eyetech CDPlus advertised in your magazine which leaves this slot free – how do these work, and are they any good? And have you any suggestions regarding modems, ie; fast serial devices that won't mean binning my Overdrive?

I may be asking too much, but I don't want to start all over again with a new hard drive, as that would leave me even less money to spend on other bits and pieces. I do hope that you can help me, otherwise I will just have to continue forsaking the A1200 while I save up for a next generation Amiga.

Steve Trower, Warks

You may have become attached to your Overdrive, but I'll think you'll find that you do not strictly need it. If you open it up, you will find a 3.5" IDE drive inside. This drive can be mounted inside your A1200 and connected to the internal IDE interface. Eyetech (01642 713185) can supply you a kit for this.

You will then have your PCMCIA slot free for more useful things. For example, you could then use one of the double-speed CD-ROM drives with PCMCIA

How to write to Q&A

You can send your queries (or a good tech tip if you have one) to Q&A, CU Amiga Magazine, 37-39 Millharbour, Isle of Dogs, London E14 9TZ or preferably e-mail: q+a@cu-amiga.co.uk. We can accept letters or text files on floppy disk. Please do not send an SAE.

WE CANNOT RESPOND DIRECTLY TO QUERIES BY POST OR OVER THE PHONE OR E-MAIL, and cannot answer every Q&A we are sent. Sorry. We do appreciate that you may have a serious problem and until Amiga International re-open a UK office you may have no-where else to turn, but we get so many questions we simply don't have the time or resources to answer them all. We do our best to use letters in Q&A that answer most common problems, so even if your own question is not answered you may find an appropriate solution here.

interface that Power Computing (01234 851500) sells for £79.95.

The CDPlus system from Eyetech also connects to the A1200's internal IDE interface. It consists of a CD-ROM drive, a 4-way buffered device, all the necessary cables and driver software.

The CD-ROM drive and your hard drive could both be connected up with this. Eyetech do a quad speed CDPlus system for £89.95. The options for a fast serial device are either the PortJunior or the Surf Squirrel. The PortJunior which is available also from Eyetech for £39.95, has claimed transfer rates of up to 460Kbaud and plugs into your A1200's internal clock header.

The Surf Squirrel is available from Hisoft (01525 718181) for £99.95. It combines a SCSI2 interface with a fast serial device with claimed rates of up to 230Kbaud. If you shop around, you may find a cheap deal on a Surf Squirrel and CD-ROM drive package – which would solve your problems in one.

A to Z

I is for incredibly intelligent, which happens to describe John Kennedy. Or is that irritating and irrational?

I is for...

.info
The file containing the graphical design of the icon, as well as it's position and type. For a file to have an icon, it must have an associated .info file.

Icon
A graphical representation of a file, program, directory and so on. We take it all for granted now, but when the Amiga first came out, this was all cutting-edge stuff. We owe it all the work at Xerox labs too, as Apple, Microsoft and just about everybody else "borrowed" from their research.

IconEdit
A utility program which is supplied as part of the Workbench suite. It's purpose is to edit or create icons. The version supplied with the A1200 and A4000 Workbench 3 is slightly bugged, and so earlier versions or public domain programs are usually a better idea.

Icontrol
Launches a program which sets up some obscure (but useful) features present in Workbench 3 and up. You can use it to change the screendrag hotkey (usually the left Amiga key), and re-position the menus in larger-than-the-screen Workbench displays.

The Avoid Flicker option is for use with Productivity mode and prevents any background screen revealed from operating in interlaced mode. Mode Promotion will try and open all new screens in Productivity mode – it doesn't work with all programs, or with games.

IconX
An AmigaDOS command which makes it possible to associate your own scripts with icons. Give the icon you create IconX as its default tool, and the same name as your script. Now double-clicking the icon launches the script.

IDE
A hard disk interface, fitted as standard to A600, A1200 and A4000 computer systems. IDE hard drives are cheap, and faster – ideal for personal computers in fact. They are available in 2.5" and 3.5" sizes: the A1200 and A600 computers were designed to house 2.5" drives, but it's possible to squeeze 3.5" drives in too.

The Amiga IDE interface can also support ATAPI compatible CD-ROM drives, with suitable cabling and driver software.

If
An AmigaDOS command which tests a condition, causing different actions to happen depending on the result.

IFF
Interchangeable File Format, the Amiga's standard for saving information to disk. IFF files are based on the notion of "chunks" inside a "wrapper", and different chunks can store different types of information. A four-character name at the head of each chunk describes its contents to the program loading it. IFF files can contain pictures, sound, text and almost any other kind of data.

ILBM
InterLeaved BitMap, just one of the type of IFF chunks in common use. ILBM files contain images.

Info
AmigaDOS command which lists information on the disks currently installed. Used either by itself, or with the name of a device, such as info dh0:.

InitPrinter
Mostly useless AmigaDOS command which sends a reset command to a connected printer.

Input
Starts the preference program which controls mouse speed, keyboard repeat rates, click speeds and so on. Make sure you select "British" from the keyboard type. Unless you're not using a British keyboard of course.

Install
An AmigaDOS program which makes a floppy disk "bootable". Apply it after formatting to make a disk which is capable of starting up your Amiga. Of course, you'll also need to copy the usual Workbench/AmigaDOS files to it.

Interface
Anything which connects two different items of hardware, software or almost anything. A hard drive interface is the hardware which allows a computer to communicate with the disk drive. A User Interface is the collection of buttons, windows and controls which allow a person to use a program.

Interlace
Often simply referred to as a "flickering" screen mode. Interlaced screen displays work in the same was as an ordinary TV image, with two fields of information updating the display every 1/50 th of a second. Unfortunately, unlike a typical TV image, the Amiga's display contains lots of very sharply defined lines which makes the display appear to flicker.

Try recording an interlaced display to video tape though, and you'll get better results than using a non-interlaced display.

Internal
Some key AmigaDOS commands are built into the Amiga's Kickstart ROM rather than existing as programs in the C: directory. These are called "internal" programs. Enter Resident at a Shell for a complete list.

Internet
The world-wide network of computer networks, capable of supporting electronic mail, Web pages and even moving video and sound.

Intuition
The Amiga's Workbench system of icons, mouse pointer, windows and so on is collectively referred to as "Intuition". Quite a cool name really, although most people call it Workbench.

Iprefs
A small program which automatically runs in the background. It's launched by the startup-sequence. It copies values stored in ENV:sys and applies them to set up colours, screen resolutions and so on.

Backchat

Back with the chat, it's what you might call a letters page. If you want to add your bile to the stew, write to the address below or email us at backchat@cu-amiga.co.uk



Microsoft joke of the month

A Boeing 747 was making its approach for landing in Seattle when an electrical malfunction disabled all of the aircraft's electronic navigation and communications equipment. Due to the clouds and haze, the pilot could not determine the aircraft's position and course to steer to the airport.

The pilot saw a tall building, flew towards it, circled, draw a large sign, and held it in the plane's window. The sign said "WHERE AM I?" in large letters. People in the tall building quickly responded to the aircraft, drawing a large sign that read "YOU ARE IN AN AEROPLANE". The pilot looked at his map, determined the course to Seattle airport and landed the plane safely.

After they had landed, the co-pilot asked the pilot how that sign help determine the plane's position. The pilot responded "I knew that had to be the Microsoft building because, similar to their helplines, they gave me a technically correct but completely useless and crap answer".

Duncan MacDonald, Swansea

Chortle, wheeze, fnuk fnuk etc... Come on, you can do better than that. Send your Microsoft jokes to "Gates Gags" at the normal CU Amiga address. The best will be printed each month in this, our brand new Microsoft gag section. Assuming we get some good ones that is.

Listen up coders!

There is a lot of good software written for the Amiga by very talented people but (begin gripe mode) why do so many of those programs not include that small bit that allows the user to quit without having to reboot? It really annoys me that a potentially excellent piece of software is ruined by leaving out this important peice of coding. I can tell you here and now that I, for one, will never use a piece of software twice, let alone register it, if I cannot quit to Workbench or DOS.

I have full admiration for those people who write software just for the love of the Amiga and its users, often for very little or no recognition, but I cannot bring myself to admire their software if it does not contain a quit option. Thankfully, most software produced does allow the user to quit and it is those programmers who put that extra little bit of thought into their programs that make the Amiga the joy to use that it has always been (end gripe mode).

Mark Crowley, via email

Obligatory car analogy

My friend owns a 1958 Volkswagen Beetle. It cost him £2000 four years ago and since then he has spent over £8000 pounds rebuilding it. It has an 1192cc engine which can pull the car to almost 60 mph, a cold uncomfortable interior, 6 volt electrics, crossply tyres, a dodgy gearbox and you can't hear yourself think inside.

With the money he has spent on it, he could have had a nice Ford Fiesta with a 16 valve engine which could go 100 mph, a nice stereo... (you get the idea). However. He doesn't want a Ford Fiesta. To him the Beetle is more than a car. It is not a mode of transport, it doesn't matter that it can't even reach the speed limit, that he can't listen to music in it, that it rattles and grates as he drives it. That's not the point. The point is that it has character, a personality of its own that it runs well enough for him because he's not bothered about racing Escorts at the traffic lights. He is above that, a different breed of car owner, one who has his own tastes dictated by what he knows he likes, not what is the latest trend. Anyone can spend £10,000 and own a Ford Fiesta but not everyone has the passion required to drive a Beetle.

To him there is no comparison because to him the Beetle and the Fiesta aren't even in the same class.

Sam Cooke, Cambridge, England.

Hint: if anyone else wants to get a car-computer analogy into Backchat, work a Split Screen VW Van into the equation somewhere along the line to boost your chances of publication.

"I think it is time someone at Amiga Inc addressed this by making a real "Amiga Office" package or something of the likes of Claris Works."

Amiga Office

This is the first time in my life I've written to a magazine, and this time I really want to be heard.

Everybody knows that something needs to be done fast for the Amiga platform to survive. I look at the magazines, see the rants on the Net, read the speeches and everything but it seems to me a lot of people lose the perspective of things: computers are supposed to be useful. I don't see what is interesting in having a rocket engine on the desk if you don't have a use for it.

One thing I see right now is a very serious lack of concrete application software for the Amiga. I see great packages: WordWorth, Final Writer, Turbo Calc... but no real cohesion between these. I think it is time someone at Amiga Inc addressed this, by making a real "Amiga Office" package or something of the likes of Claris Works. Tons of people don't

Sam supporters club

Part 1

Dear John



I read your article in this month's mag on the Sam Coupé with interest, not because I had one, but because I was one of those Spectrum+ 3 users who considered it as a possible upgrade path back in 91. However, lack of funds and luck made me wait until I could afford my A1200.

I was digging around in a packing case and found the enclosed "Your Sinclair" Spectrum magazine. If you look on page 71 there is a bit of a rave review on the Sam. Hmmm, looks like a fair outbreak of optimism supported by a large amount of artistic licence in the wordage. After reading that, a bloke could get a bit mis and paranoic about his favourite computer today. Never mind if Gateway 2000 sink the Amiga – I've still got the old Speccy+ 3 to fall back on. Oh yes, I still have it.

Please keep the mag and show it around the (ahem) "younger" members of the publishing team to show them how it was in those days.

M Domoney (Mikdom) , Lincs

Part 2

Never before have I been moved to tears by words written about a machine (apart from when Wordworth suggested "myalgia" instead of "my Amiga"). John Kennedy's Techno Tragedy article about the Sam Coupé moved me so much that I scrambled up to my loft and got out all my old issues of Your Sinclair. Oh how I laughed at teh excessive use of phrases like "Blim!", "Lummocks!" and "Specchum", but most of all the YS motto: "It's crap, in a funky skillo sort of way". Oh how many more techno tragedies stared up at me from the pages: the Spec-drum, the +D drive, the list is endless.

Commeth I to the August 1991 issue. In the 'Tipshop' section was a letter written by a Mr G Sweeney. Not the same G Sweeney from March's CU Amiga letters page? Sureley not? Anyway, G's (as he was refered to throughout the letter) tio for Kendo Warriors doesn't work so don't try it or people will laugh at you in the street! And yes, I still have all the magazines from June 91 to September 93. I'm not sad, and I have loads of friends, honest.

Captain Kumquat, Andromeda

Seeing as that magazine was published by A.N. Other Company, we've re-printed a bit of Sinclar User, which was always much better than Your Sinclair anyway. Oh, and since when, Captain Kumquat, do you get a Luton postmark on letters sent from Andromeda?

want or need more than that from computers.

On a more technical side, the Amiga is years behind the PC in "visual" development tools. I think it's essential that something like Visual Basic or Delphi comes to the Amiga to get more software going. Imagine the power of the Amiga combined with the ease of programming a visual language... and don't forget that the bulk of PC development is done with those languages today.

I also think that there are plenty of uses for the Amiga OS beyond the machine itself, and I cannot help but rejoice on the low development platform costs.

I also agree with Andrew Korn on a "kids" Amiga. As long as it is well done (68040, 16MB and a CD minimum), it will catch on.

Just my .02$...

Francois Landry, via email

Amiga UK, OK?

I'd like to make some comments on Amiga Inc/International:

1. I agree with all of the April '98 issue's Points of View, especially about having a UK office. It is in the UK that the Amiga has had all the best software and hardware companies and I urge you and your readers to bombard Amiga Inc/Int with emails and letters telling them "We want a UK office!".

2. I also think that Amiga should make a new machine THEMSELVES and get it into the the shops now! Third parties aren't big enough to risk it themselves and the Amiga isn't going anywhere until they do. If they do this the third parties will follow their example. Again I urge you (as the biggest selling Amiga mag) and your readers to tell Amiga Inc/Int this as I think it's very important and should be addressed by Amiga.

"There is of course a school of thought that says I must be mad to spend good cash on a dying medium."

3. Reading a recent issue of Official PlayStation Magazine they said "With the Amiga gone, software publishers are wondering where new generation programmers will come from, because PCs are too expensive and don't have the 'bedroom programmer' effect". Why don't Amiga Inc capitalise on this and do some sort of deal with Sony to have cheap PlayStation developing software distributed with new Amigas so would-be programmers can then cheaply program a PlayStation game and then take it to an official Amiga or Sony dealer and have the CD cut for a few quid. I think this would be exellent publicity for the Amiga as all the PlayStation mags would no doubt cover the story. As before I urge you and your readers to email Amiga Inc, Sony and the PlayStation mags.

Taj Hussain, Leeds

Slapped wrists

It is very annoying when trying to follow your otherwise good tutorials to find that the text does not match with the screenshots or that the wrong pics are inserted on the page. Let's take a few examples from the April 98 issue. PPaint tutorial Pt 3, Effect of dithering. The text does not match the pics – which is correct? Also pics 9 & 10 are identical – not much use to demonstrate the effect!

I also commented on pics in the Scala tutorial showing buttons not on my CD version of MM300 in a previous E-mail to Q & A. Disk loading instructions come in for their fair share of mishaps too: April's issue refers to Scala not Shapeshifter.

It's a pity that this sloppiness mars an otherwise excellent magazine. Just another 5% required.

John Thompson, Farnham

Well spotted John. It's not how it should be and we won't bother reeling out the excuses but will try even harder next time. Can we go now?

The Amiga problem

Having been a dedicated Amigan since 1988 when I binned my Speccy, I am becoming increasingly alarmed by the attitude currently prevailing that we are witnessing the death of the Amiga.

I support wholeheartedly the view expressed by Andrew Korn in May's CU Amiga, that we must support developments by spending hard cash. During the last 12 months I have spent over £500 on hardware and software for my 1200, including a CD-ROM and a 1.6Gb hard drive. Even though these items have been disproportionately very expensive when compared to the vast PC market, I have deliberately stayed away from converting to the PC.

The main reason for this has been the cost of PC software. My hobby is graphics and in particular 3D and raytracing. The cost of many 3D packages for the PC is truly horrific!

There is of course a school of thought that says I must be mad to spend good cash on a dying medium and we see all too often in computer mags the recommendation to "buy a second hand 1200" as though it just isn't worth spending out on a new one.

The other advice given regarding the question of upgrading is "hang on a bit and see what the model 123XYZ is like before buying. There is always a good reason not to buy

anything as it will soon be out of date, but can you really put a figure on 'lost enjoyment'? Buy it, use it and enjoy it – to hell with the next stage of developement!

People who rushed out and bought the first A1200s were rewarded by them catching fire. Those who bought 12 months latest were buying a great little machine with the problems ironed out, so should we rush at the latest thingy which may not have been tried and tested?

The true Amigan does not want to be a computer 'owner' having to have the latest and fastest gizmo. He/she is a computer 'user' who bought their machine to do a specific job.

Support the Amiga, expand your machine with tried and tested hardware, look after the developers as they have looked after us and never mind what the next big gizmo will be. And remember: tomorrow will be yesterday in two days time!

John Hughes, Salisbury

Attutide problem?

In the May Points of View John Kennedy says that Amiga is an attitude, no more and no less. While I don't dissagree that certain attitudes form much of the essence of Amiga, I believe there is a bit more to it.

My assesment of what makes up the Amiga is that it is the attitudes (or expectations) plus a definite set of standards. The standards I believe are the embodyment of the attitudes. Standards assure that things will work together and that things will be supported. The main thing the Wintel world lacks is good, reliable standards. The main thing the Mac world lacks is openness. The Amiga struck a good compromise between the two in the past, and is in the process of being revamped to do the same thing in the future. Amiga people want a system which is versatile and powerful while at the same time being friendly and reliable. We do not want to be dictated to by software nor hardware nor yet the companies which manufacture them. We want the computor to be our servant and not vice-versa. That is our attitude and our goal.

Donovan Reeve, via email

Time for change

It seems there are two camps when it comes to the question of the future of the Amiga. One of these thinks that Amiga Inc should get tough, get a big budget from Gateway 2000 and take on Microsoft. The other camp wants the Amiga to retains its individual identity and become successful once more without chasing the lead set by Bill Gates.

This was backed up by the results of your Big Amiga Poll in the May issue. In your analysis of the results, this one in particular, you implied that it was "wishful thinking" to hope that anyone could budge Gates from his current position. While I respect your frank and honest comment (the last thing we need is a mag that's nothing more than an unofficial propaganda machine for Amiga Inc), I feel this isn't such a pipe dream after all.

Remember, Gates and his empire came from humble beginnings. Also, while it's hard to see how things could change, I bet that's what people thought about the Romans at the height of their dominance! Even though people want the hassle taken out of buying and using personal computers (something which has been exploited incredibly well by Gates) I think people will soon come around to the idea of having a choice.

OK, so the accountant who just wants to crunch numbers probably won't give a toss what machine or operating system he uses. However, even those who don't want to make their own decisions will ask the advice of someone else. This could be a friend, a technology journal or a salesman.

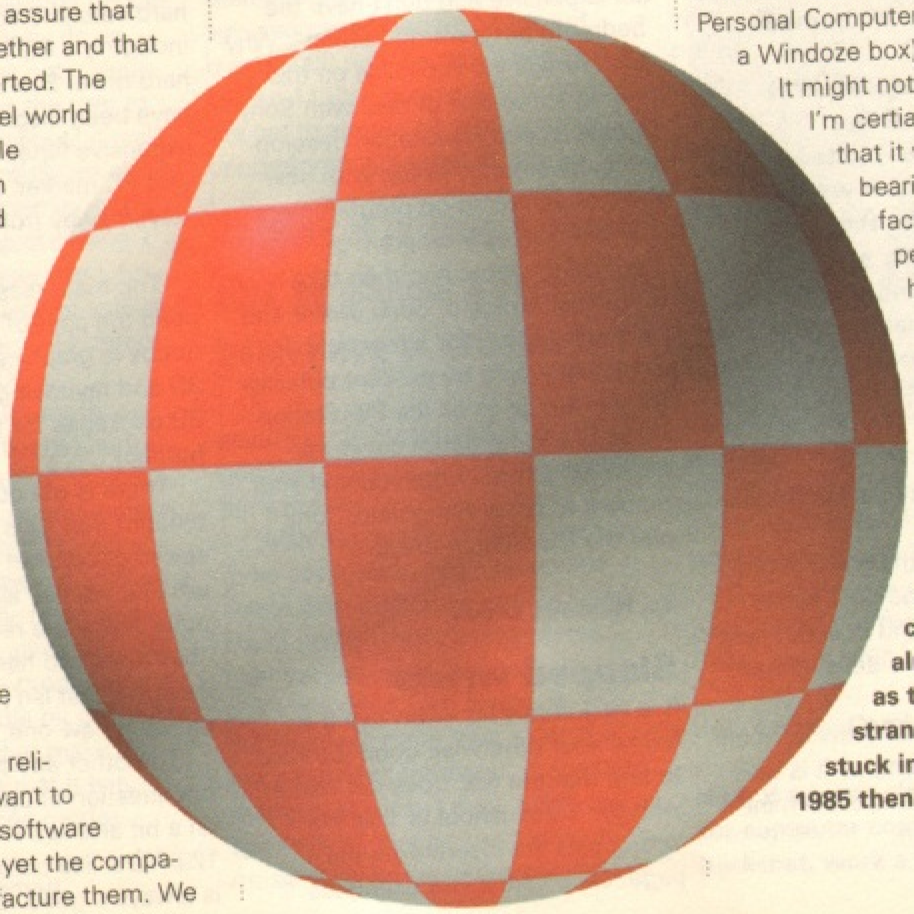
In the workplace, the computer systems people use are chosen by people who have a specific interest in information technology. It's these people who could be the linchpins in the potential uprising of the Amiga as a 'new' platform. If it's sold properly to IT buyers and systems analysts it could rapidly filter down into the high street and into the home on the back of their expert advice, and also the plain fact that someone sitting at work in front of a computer that says "AMIGA" on it is more likely to go for the same brand when looking for a home PC (that's PC meaning Personal Computer in this case, not a Windoze box).

It might not happen this way. I'm certianly not saying that it will, but it's worth bearing in mind the fact that it *could* happen like this. Let's hope it does.

Lee Burgess, Kent

That's a good point Lee. One thing worth remembering is that technology comes and goes almost as regularly as the seasons – strange how we're still stuck in the summer of 1985 then isn't it?

"Also, while it's hard to see how things could change, I bet that's what people thought about the Romans at the height of their dominance!"



To the Point...

Don't knock CDTV!

In the April Issue of CU Amiga in the Backchat area, some bloke/blokess called "Jaydee" wrote in asking if there would be any attention to the Amiga CDTV. CU replied with a basic "no" stating that the CDTV was "absolete technology". However, it may be old and obsolete, but it's still the *only* f'ing machine in the world that will succesfully play my "Nasa The 25th Century" CD that I dearly love!

Hugo Wilkinson

That about sums up the usefulness of a CDTV in the late 1990s – or the early 1990s for that matter! Maybe next month's cover feature will be 101 things to do with a CDTV. Suggestions on a postcard to the usual address...

Digital cameras

Your digital camera feature in the May issue has convinced me I must have one! I'm hoping to get hold of one of the Olympus models when I've got enough cash together. I'll send you some snaps via email!

Gary Beach, via email

You do that Gary. We'll keep you posted of further developments on the digicam front. Take a look on page 64 of this issue for a review of Power Computing's offering which just missed last month's deadline.

More music

I've always found CU Amiga the best Amiga mag for music coverage, but recently there hasn't been much in your mag. Why not? We want more music coverage! How about getting Dex & Jonesey or Aphrodite to do a regular column? I'm hearing lots of positive things about Aphrodite recently with Micky Finn and Urban Takeover. Is he still using his Amigas?

Guy Shinkler, West Glamorgan

CU Amiga reserves the right to edit letters so that they make sense, fit onto the page and don't ramble on too much.



3 ISSUES FREE!

SUBSCRIBE TO CU AMIGA THIS MONTH AND GET 12 ISSUES FOR THE PRICE OF 9*

Complete the form below and send payment to: CU Amiga Subscriptions, Lathkill Street, Market Harborough, Leicester LE87 4PA or if you wish to pay by credit card call our subscriptions hotline on 01858 435350 quoting source and offer codes. Lines are open from 8.30am to 9pm Monday to Friday and 10am to 4pm Saturday and Sunday.

5 GREAT REASONS TO SUBSCRIBE:

- **Save £18.00 on the CD issue, £14.00 on the disk issue**
- **No risk that the newsagent will be sold out of the CD or disk edition you want**
- **All issues delivered to your door so you'll never miss an issue**
- **No charge for postage and packing in the UK**
- **A money back guarantee on un-mailed issues if you are not satisfied**

SUBSCRIPTION HOTLINE 01858 435 350

SUBSCRIPTION ORDER FORM:

Name: ....

Address: ....

.... **Postcode:** ....

Date of Birth: .... **Telephone:** ....

Source codes: CD Edition 001B Disk Edition IA2T Offer codes: CD Edition CD 00ID Disk Edition DD IA2Z

Annual Subscription Rates:	Disk version	CD version
United Kingdom + NI	❑ £40	❑ £54
Air Europe + Eire	❑ £55	❑ £69
Rest of world /air	❑ £75	❑ £89

METHOD OF PAYMENT (A receipt will not be issued unless requested)

Direct Debit Instruction to Your Bank/Building Society

Account in the name of ....

Payments will be deducted quarterly.

Account No ☐☐☐☐☐☐☐☐

Sort Code ☐☐ ☐☐ ☐☐

DIRECT Debit ID No 724096

Name and Address of Bank/Building Society ....

....

....

Signature ....

Date ....

Please pay Emap Consumer Magazines Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee Banks/Building Societies may not accept direct debit instructions for certain kinds of accounts.

Payment by Credit Cards

Please debit my credit card for the amount shown overleaf.

☐ Mastercard ☐ Visa ☐ American Express ☐ Diners Club

Access/Visa/American Express/Diners Club Account No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiry Date ☐☐☐☐ Date ....

Signature ....

All other payments

I enclose a ☐ Cheque ☐ Postal Order

☐ International Money Order ☐ Sterling Draft (Please tick)

MADE PAYABLE TO EMAP IMAGES LIMITED

On occasion EMAP Images Limited and associated companies within the EMAP Plc group may permit other reputable companies to make offers of products or services which we believe may be of interest to our customers. If you DO NOT wish to have the details given here passed on, please tick the box ☐, or mention when calling. Telephone calls may be monitored for staff training purposes.

Points of View



Time for a few more opinions... please note that the views expressed here are not necessarily those of CU Amiga.

A word from our sponsor...

Last month had SBase4Pro on the cover disks and CD. We also had an advert from its developers, Mr Hardware, for people to buy manuals and other SBase4Pro related products. The text in the advert contained the sentence "Frankly, we think the other platforms are crap". Tony the editor advised Joe Rothman (Mr Hardware) that it sounded a bit unprofessional and that he might want to rephrase it. Joe Rothman disagreed! We liked his response so much we've printed it here for public consumption...

I hear you about the professionalism issue, but I'd like to keep the word crap. I've noticed a very strange thing that Amiga owners do and in this case I want to set a good (bad) example. I want people to know I think it's alright to get indignant and perhaps to not be so polite when it comes to other platforms. After all, no one treats Amiga owners fairly. No one gives us any notice or treats us with any respect.

I believe that Amiga owners are much more intelligent than the average PC owner. Most of us bought an Amiga because we looked at all the other computers and decided that the Amiga was best. Most PC owners bought them because someone else had one, because they "needed" one to run a certain program, because their school, boss, or accountant insisted upon it. Or they bought them because they wanted "PC compatibility." The point is that none of them had a reason that was based on research. Any research that was done was to decide which clone to buy, not which computer type to buy.

Kids who buy video games are more intelligent and in tune with reality than PC owners. Kids can see the difference between the game consoles and they don't care if their old games are rendered useless by their new purchase. PC owners think they have made a wise choice because they have made the choice of the masses, but unfortunately they are just fooling themselves. There isn't even any real compatibility. Just replace everything once a year and you can keep going with a PC. I have Amiga programs that were written in 1986 that still work just fine today, only faster.



"I use the word crap because I'm polite enough not to say something worse, but not polite enough to care if I hurt some PC users feelings."

The intelligent Amiga owners have a tendency to treat the computer industry with the same philosophical point of view as they treat equality between the races or freedom of religion. They tend to go out of their way to defend the PC owner's rights just like they would defend a battered wife. No one on the other side does that for us. I know it sounds pretty strange, but I wish we would just treat the other camp with a lot less respect.

How else will they ever begin to realise their mistake? They are using braindead computers they can't stand, and subsequently not enjoying their experience, but we're too polite to tell them how dumb they've been. The PC market is one that's upside down. People buy PCs to run programs that aren't available for other computers. If clothing manufactures started making clothes in colours no one liked, we wouldn't buy them. But write us inferior software and dictate the computer type we need to own to use it and we'll make you rich. Very strange!

The really interesting thing is if you substitute cars for computers, suddenly the rules change. Just about everyone has a favourite car. Most of us have good reasons for liking one car over another. No one is afraid to give their opinion or ignore someone else's advice.

Faster is not necessarily always better. Comfort is just as important as style is. Gas manufactures don't ever tell you what kind of car you should buy, and if they did I think we would have a fit. Turn the discussion to computers again and most people turn into sheep.

Sooooo, I use the word crap because I'm polite enough not to say something worse, but not polite enough to care if I hurt some PC users feelings. ■

"I want people to know I think it's alright to get indignant and perhaps to not be so polite when it comes to other platforms."

Joe Rothman is head of Mr Hardware

Sleeping with the...?



When John Kennedy used these hallowed pages to suggest Windows CE for a futureAmiga operating system, he was taking his life into his own hands. I hope I'll get a little less in the way of abuse by suggesting that rather than sleeping with the enemy, the Amiga ought to just get married to an old bedfellow.

We've been emulating Macs on the Amiga for years. Why not? It works well, far better than emulating PCs, because of the family similarity with Mac hardware. AGA doesn't do a great job of MAC screenmodes, but a graphics card will solve that. Of course the Mac beat us to PPC, but we should overcome that compatibility hurdle in the near future.

Things change, and while there is much debate on the ideal future shape of the Amiga, there are a few things which are now settled. We're going PPC, we need modern graphics cards. Whatever else happens, these two can be counted on. Of course this means closing the remaining gap between Amiga and Mac hardware – Mac OS could run on Amiga hardware. And, with a few qualifiers, the reverse would be true. Assuming we get a PPC version of Amiga OS, why not run it on Mac hardware?

Macrosystem's Draco soldiered along without the custom chips reasonably well, but the need for AGA compatibility gets less and less. Just so long as we get drivers for a few PCI cards, anything capable of opening a retargetable screen could work fine. Older software and AGA games would choke, but that's about it. With the growing popularity of AHI, sound will become less and less of a problem.

"Just so long as we get drivers for a few PCI cards, anything capable of opening a retargetable screen could work fine."

Recent changes in company policy at Apple might make this quite acceptable to them. As Amiga Inc are concentrating on OS development and standards design for third party manufacture, Apple have moved away from this model to concentrate on making money out of hardware sales.

So why shouldn't Amiga Inc and Apple join forces? Apple could sell more hardware, as it could sell it into the Amiga market, and the Amiga would have a large, ready made supply of hardware readily available. The same hardware could be offered with a choice of ROM boards depending on whether it was an Amiga or a Mac the purchaser was after, or even with a dual ROM for a multi OS platform. It would mean we'd benefit from Mac hardware developments, while they benefit from ours.

Companies like Villagetronic could concentrate their resources on hardware which ran on both platforms instead of having to do ranges for Macs and Amigas, and the Mac guys could get hold of a phase5 multi PPC pre\box.

I know that some of you think that the Amiga is all about custom hardware, but it still can be – why not share it with the Apple guys, while benefitting from their custom stuff too?

With Mr Gates so dominant in the market, a strategic alliance between the Amiga and Apple could only be a good thing. ■

Andrew Korn is Deputy Editor of CU Amiga

Software Piracy on the Amiga

A regular occurrence in the Amiga newsgroups is former Amiga users asking for software to run on UAE, "not knowing" that Amiga software still is copyrighted, people shamelessly asking for pirated software, and people revealing themselves in comments about software that only apply to cracked versions.

All this has been discussed in the newsgroups, sometimes by the authors themselves. For example, by FFNews author Thorsten Stocksmeier when he got angry at the number of pirated copies – some people mailed him bug reports using pirated keyfiles (you can tell by the header). Someone even flamed Angela Schmidt because he had problems with a pirated version of her tool DisKey – cracked versions may damage your disks.

Since there aren't many big commercial developers left, crackers have hit shareware authors and smaller companies hard, people who often have to earn their living from the small numbers they sell. Most shareware authors are affected by such activities, including myself. Recently someone sent me an email where he stated:

"Do you have any reports about fake keys for your program? One man told me that he can get me SuperView key...

"I decided to check my key. I think, you must make it more complicated. [...] I know that now it is a bit complicated to change key-code. But in future (SViewNG2) make some good coding here."

Unfortunately, one can't protect programs against experienced crackers. You can make the protection difficult enough for the average user and programmer, but if someone with professional knowledge tries hard, he will find a way.

If someone wants to fake keyfiles of my software or crack it, he has to put some work into it. There is no excuse and no "oops, it was just accidental, I couldn't help". Surely that person must know that he or she is going to destroy a software development.

"I prefer to spend my time on programming and improving my programs rather than thinking about new methods against software pirates."

What should I do against such individuals? They'll never learn. They destroyed most of the Amiga's game and application market in the past, and they continue to do that for some strange kind of "fame".

Nevertheless there's a price they will have to pay for it: more and more programmers and software houses will have to stop developing for Amiga, because it doesn't pay, and in many cases they can't earn their living any more.

I prefer to spend my time on programming and improving my programs rather than thinking about new methods against software pirates – experience shows that such efforts mostly affect the honest users and decrease overall product comfort/quality.

Someone recently mentioned a wise saying: "locks are only there to keep the 'honest' people out, as criminals have all the tools to gain entry". Feel free to spread the word of this article (instead of keyfiles of my programs) to every cracker you know out there – if there's a bit of brain and *real* fame left, they may like to consider it.

My last word – 'though I can't say it better than Miami author Holger Kruse did after the recent Miami Trojan issue – one never knows what additions a cracked program may contain. The same goes to normal application software (eg; certain Telnet clients) suddenly released by well known cracking groups.

Spread the word, not the disk and don't trust the pirates! ■

Andreas R. Kleinert is author of the AK datatypes and many other well-known shareware programs

TECHNO TRAGEDIES The BSB Squarial

Back in the old days – before The Simpsons was known by all – some houses had little baking trays attached to their walls... Why?

In the late 80's and early 90's, the British television viewing public were in a quandary. Suddenly they were being told that "terrestrial" television was old hat, and the future was in the sky: to the East in fact, by about 19 degrees. Thanks to satellites such as Astra and Macropolo, broadcasting was coming from space, offering sporting events, movies and real competition to the old fashioned ground based terrestrial stations.

The two rival services which were fighting for the UK market were Rupurt Murdoch's Sky broadcasting, and BSB – British Satellite Broadcasting. BSB had the blessing of the UK government, and more importantly for us, it had the "squarial". A horrible new word it might have been, but squarials were relatively discrete little units compared to the giant circular monstrosities we happily bolt to our houses these days.

The black, flat little antenna looked like it was going to usher in the age of hi-tech satellite TV to a country only just getting used to the fact that their TVs now could pick up Channel Four if there was nothing else on.

BSB tried to do everything the "proper way", using a special picture transmission format called D-MAC. D-MAC was a high quality system, but it was also quite complicated. The decoder boxes were expensive to produce, and it was for this and various other reasons that the launch of the BSB service was delayed and at least one national launch was aborted.

Meanwhile, Sky operated theirs using the considerably cheaper PAL system. No-one was quite sure if the PAL broadcasts would work from satellite, but they did and they worked well enough for viewers to be happy. Of course, it was totally incompatible with the BSB system, and no-one wanted to have to install two satellite dishes and sit two black-box decoders under the television sets. The public had to make a choice.

The fact that Sky pushed its way onto the market and was running a year before BSB was instrumental in building up a base of subscribers. Murdoch's media empire was able to push Sky as the dominant standard. However, virtually giving away the satellite receiver kits was costing both companies a lot of money, and it became obvious that the market wasn't big enough for two rival systems. In 1990, Sky and BSB merged to become British Sky Broadcasting.

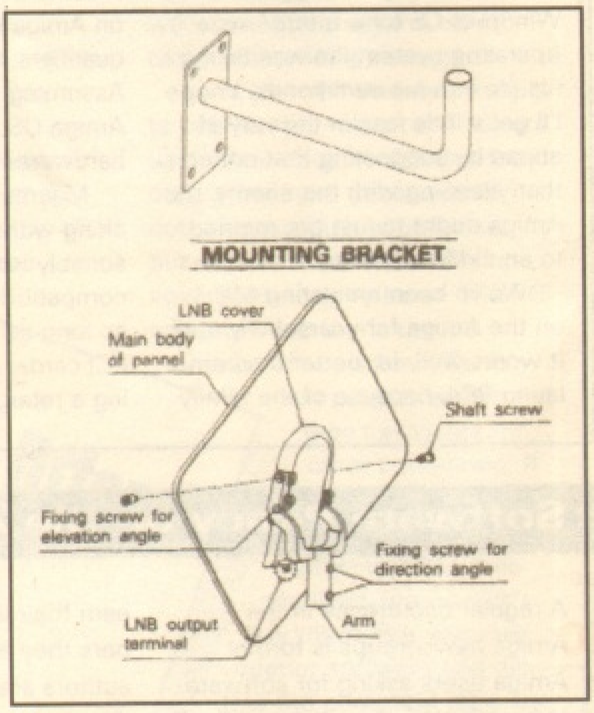
The D-MAC transmissions were stopped, and the squarial became a useless piece of black plastic mounted on outside walls.



▲ I'm sorry, but shouting will get you nowhere love.

The squarial lives on

OK, so it's not really fair to call the squarial itself a failure – it was the manner in which it was implemented by BSB which killed it off. The squarial still works well as an antenna. I've seen DIY electronic projects which use the squarial as a local radio transmission system, and there is at least one commercial system which uses squarials to beam video signals up to 75 feet using low powered transmitters.



▲ Of course, you may find it of more use as a handy coat-hook...

The receivers too can be modified to work with D2-MAC satellite systems, and there are many enthusiasts in the UK who use the modified BSB set-up to watch signals from the myriad of orbiting transmitters hovering above the earth.

If you are interested in finding out more about the squarial, and how it can be given a new lease of life, see the excellent web sites below which detail the rise and fall of the squarial. ■

John Kennedy

Web resources

http://www.meldrum.co.uk/mhp/testcard/bsb.html
http://homepage.eurobell.co.uk/colinmc/bsb.html
http://www.mbarber.demon.co.uk/sky-birth.htm

The European Satellite User Group
Subscription details – UK 01227 265222



SOUNDPROBE PLUS SAMPLING HARDWARE ONLY £34.95
NEW
IBROWSE V1.2
£29.95
CD-ROM DRIVE
SQUIRREL SCSI INTERFACE
3 FREE CDs
DOUBLE SPEED £79.95
QUAD (3.4) SPEED £119.95
TWELVE SPEED £169.95
ADD £30 TO THESE PRICES FOR A SURF SQUIRREL INSTEAD OF A CLASSIC SQUIRREL
CD REWRITER
RICOH MP6200/DP MECHANISM
2X WRITE & REWRITE, 6X READ
INCLUDES MAKECD 3.1 SOFTWARE
INCLUDES 5 CD-Rs & 1 CD-RW
WOT A BARGAIN!
£429.95
SCSI
Utilities Experience
DOUBLE SPEED PACK ILLUSTRATED
BARGAIN CD-ROM PACKS
CD-RW DISCS £16.95 EACH
PACK OF FIVE CD-R DISCS £11.50
CINEMA 4D
THE CD EDITION (V4)
INCLUDES CINEMAFONT & CINEMAWORLD
INCLUDES MEGABYTES OF TEXTURES
INCLUDES MANY EXAMPLE MODELS & SCENES
INCLUDES FULL VERSIONS OF MAGICLINK & MAINACTOR
MEGA DEAL
ALL THIS
AND MUCH, MUCH MORE
FOR ONLY
£99.95
(NO, YOUR EYES DO NOT DECEIVE YOU, THAT'S NINETY NINE NINETY FIVE)
UPGRADE PRICES
FROM V2 £69.95
FROM V3 £29.95
Don't forget our wide range of software and hardware for your Amiga, which includes music and midi packages, accelerator cards, memory, disk tools and utilities, programming languages, printing software, zip drives and an extensive catalogue of cd-rom titles at unbeatable prices.
TWIST 2 DATABASE £39.95
FREE MaxonMAGIC WORTH £29.95 WITH EVERY ORDER PLACED FROM THIS ADVERTISEMENT. QUOTE REFERENCE: FREESAVER
0500 223 660
VISA
DELTA
MasterCard
Call free (within the UK) to order any HiSOFT product using your credit/debit card. We accept Mastercard, Visa, Switch, Delta, American Express etc. at no extra charge. Carriage is £4 (2-3 day service) or £6 for guaranteed next day delivery (for goods in stock). All prices include UK VAT. We also accept cheques, POs and official purchase orders.
© 1998 HiSOFT. E&OE.
HiSOFT SYSTEMS
The Old School, Greenfield, Bedford MK45 5DE, UK
tel +44 (0) 1525 718181 • fax +44 (0) 1525 713716
www.hisoft.co.uk • www.cinema4d.com